THE CANADIAN NURSE

L'Infirmière Canadienne

VOLUME 50 **NUMBER 6**

JUNE 1954

The views expressed in the various articles are the views of the authors and do not necessarily represent the policy or views of The Canadian Nurse *nor of the Canadian Nurses' Association.*

Editor and Business Manager
MARGARET E. KERR, M.A., R.N.

Assistant Business Manager
Kathleen Williams English

Subscription Rates: Canada & Bermuda: 6 months, $1.75; one year, $3.00; two years, $5.00.
Student nurses — one year, $2.00; three years, $5.00. U.S.A. & foreign: one year, $3.50; two years, $6.00.
In combination with the *American Journal of Nursing* or *Nursing Outlook:* one year, $7.00.
Single copies, 35 cents.
Make cheques and money orders payable to *The Canadian Nurse.*
Detailed *Official Directory* appears in June & December.
Please give one month's notice of *Change of Address.*
Authorized as Second-Class Mail, Post Office Department, Ottawa.
National Advertising Representatives: Edwards & Finlay Ltd., 34 King St. E., Toronto 1, Ont.
Member of Canadian Circulations Audit Board.

1522 Sherbrooke Street, West, Montreal 25, Quebec

Between Ourselves

As an impartial observer of the smooth manner in which the membership of the ***Manitoba Association of Registered Nurses*** is adapting itself to the changes brought about by their new professional Act, we have decided that the "gears" referred to by guest editor **Evelyn M. Watts** must be the new automatic transmission variety. Having district associations that are an integral part of the provincial body instead of isolated graduate nurses' associations is a forward, progressive step that will bring Manitoba into line with the organizational practice in the other provinces of Canada.

Miss Watts, who is president of the M.A.R.N., was born, educated and trained in Hamilton, Ont. Following her graduation from the General Hospital there she proceeded to acquire her certificate in public health nursing at the School of Nursing of the University of Toronto. She joined the Ontario Division of the Canadian Red Cross Society as charge nurse in an outpost hospital, later becoming a district supervisor. She was on the staff of the Hamilton Health Department when she enlisted with the R.C.A.M.C. in 1942. Following three years of service in England, France and Belgium, she returned to university and studied for her certificate in administration in schools of nursing at McGill School for Graduate Nurses. Since then she has added some specialization in tuberculosis nursing to her skills. Miss Watts is assistant matron of Deer Lodge (D.V.A.) in Winnipeg at present. When her hospital duties and association responsibilities allow her some leisure, she enjoys her piano or dabbles with oil painting.

* * *

This issue is devoted almost exclusively to considerations of the numerous problems created by the sharp increase in the incidence of ***poliomyelitis*** in Canada. It is our earnest hope that by thus concentrating so much material we shall be making available to every nurse the equivalent of a textbook on present-day thinking and practice regarding this disease.

Poliomyelitis is not a new disease of the 20th century. In its earlier manifestations it occurred much more commonly in children under five, hence the use of the term "infantile paralysis." Today, the disease strikes more commonly in adolescence, even in adulthood.

The first reported outbreak of polio in Canada came in 1881. From 1880-84, 23 cases occurred. The incidence of the disease increased slowly but steadily: 1890-94, 151; 1900-04, 349; 1905-09, 8,054. The number has continued to multiply every year. The transformation of the relatively uncommon "infantile paralysis" of the 19th century into epidemic poliomyelitis of almost worldwide distribution presents one of the more formidable problems of public health. So far it is a disease that can neither be prevented or magically cured. The majority of people who are stricken develop sufficient antibodies to throw off the disease before they show any symptoms but not, unfortunately, before they have passed it on to others. Thus, the prevalence of "carriers" makes it almost impossible to chart the possibility of the disease appearing in epidemic proportions at any time and in any community.

As part of a worldwide campaign against polio, the World Health Organization Expert Committee on Poliomyelitis is considering the more or less universal distribution of printed polio precautions. They make some specific suggestions. Some of them are of especial interest to us:

1. The activity of people suffering from an illness in which polio is suspected should be restricted for a week.

2. People in intimate association with polio cases should take the minimum amount of exercise from 5 to 21 days after exposure. Fatigue from any cause, uncluding travel, should be avoided.

3. Tonsillectomies and adenoidectomies should be avoided during epidemics. Diphtheria and whooping cough immunizations need not be discontinued in the polio season excepting at the time of a severe epidemic.

4. Avoid large-scale use during epidemics of intramuscular injections of an irritant character — e.g., organic arsenicals and heavy metals.

5. Schools need not be closed nor public gatherings banned. Swimming pools with adequately chlorinated water may operate but should not be overcrowded. Unchlorinated pools should be closed.

New Products

Edited by DEAN F. N. HUGHES

PUBLISHED THROUGH COURTESY OF *Canadian Pharmaceutical Journal*

ACHROMYCIN Capsules

Manufacturer—Lederle Laboratories Division, North American Cyanamid Ltd., Montreal, Que.

Description—Orange opaque capsules, 250 mg. of tetracycline HCl crystalline.

Indications—For the treatment of pneumonia, with or without bacteremia; pharyngitis; bronchopulmonary infection; acute bronchitis; pertussis; otitis media; acute or chronic pyelonephritis; mixed bacterial infections; scarlet fever; bacillary dysentery; soft tissue infections due to susceptible organisms; osteomyelitis; epidermal abscesses; acute brucellosis in combination with other antimicrobial agents; and meningitis.

Since the chemical structure and in vitro activity of tetracycline closely parallels that of chlortetracycline, it is believed that the drug will prove to be of value in the treatment of the rickettsial diseases, primary atypical pneumonia, acute anthrax, mastoiditis, actinomycosis, acute extraintestinal and intestinal amebic infections, gonorrhea including gonorrheal ophthalmia, and in subacute bacterial endocarditis produced by both Gram-positive and Gram-negative bacteria sensitive to Achromycin.

Administration—Orally. In the rare individuals where side reactions occur, fluid given with capsules will aid in absorption and prevent irritation due to high concentration of Achromycin in the intestinal tract.

Dosage: The average suggested minimum daily dose for adults should be 1 gram divided into four 250-mg. doses. Dosages in children should be proportionately less than the adult dosage (i.e., a 44-lb. child should receive 50 mg. 4 or 5 times daily). Therapy should be continued 1 to 3 days beyond the time when characteristic symptoms or temperature have subsided. Average oral dosage is 12.5 to 20 mg. per kilo of body weight for adults and children. Always administer each dose with or immediately after a meal or with a bland drink, preferably milk.

Precautions—The use of antibiotics occasionally may result in overgrowth of non-susceptible organisms—particularly monilia. Constant observation of the patient is essential. If new infections appear during therapy, appropriate measures should be taken.

AMEROTOL

Manufacturer—Americaine Inc., Evanston, Ill.; *Can. Dist.:* Brent Laboratories Ltd., Toronto, Ontario.

Description—20% dissolved benzocaine; 0.39% oxyquinoline benzoate in water-soluble base with high gravity glycerin.

Indications—For control of pain in otitis media and externa, furuncles, etc., and removal of impacted cerumen.

TERIDAX

Manufacturer—Schering Corporation Limited, Montreal, Que.

Description—Each tablet contains 0.75 gm. Triiodoethionic acid, a cholecystographic medium that gives optimum visualization of the gallbladder following oral administration. Following oral administration, concentrates in the gallbladder render it opaque to x-rays. Measures the functional capacity of the biliary system by indicating the ability of the gallbladder to concentrate bile and to respond to a fatty meal.

Administration—Four to five tablets depending upon body weight 10 to 12 hours prior to x-ray.

BARDASE

Manufacturer—Parke, Davis & Company Ltd., Walkerville, Ont.

Description—An anticholinergic, starch-digestant sedative. Each tablet contains: Ext. belladonna 1/6 gr.; phenobarbital ¼ gr.; Taka-diastase 2½ gr.

Indications—For patients with smooth muscle or visceral spasm, particularly that involving gastrointestinal or genitourinary tracts.

Administration—1 or 2 tablets 3 times daily, as prescribed.

BRONCHOSPASM

Manufacturer—Dymond Drugs Limited, Brantford, Ont.

Description—Each tablet contains: Ephedrine hydrochloride ⅜ gr.; phenobarbital ¼ gr.; extract hyocyamus ⅛ gr.

Indications—Bronchial asthma and management of the common cold.

Administration—Patients who suffer regular daily or nightly attacks should be given 1 to 3 tablets in each 24 hours or as prescribed by the physician.

BRONCHO-RECTAL JUNIOR Suppositories

Manufacturer—Anglo-Canadian Drug Company Limited, Oshawa, Ont.

Description—Each suppository represents the therapeutic activity of 5 minims of creosote.

Indications—For therapeutic and symptomatic treatment of chronic and acute bronchopulmonary affections. Provide a means of administering creosote at adequate therapeutic dosage levels, to avoid gastric irritation.

Administration—Insert one or two suppositories, according to age of child in the rectum night and morning. Frequency of administration may be increased to three times daily.

ERYTHROSULFA

Manufacturer—The Upjohn Company of Canada, Toronto, Ont.

Description—Each tablet contains: Erythromycin 100.0 mg.; sulfadiazine 83.0 mg.; sulfamerazine 83.0 mg.; sulfamethazine 83.0 mg.

Indications—Provides broad-spectrum antibacterial effect for injections due to staphylococci, streptococci, pneumococci or Gram-negative organisms.

Administration—Two tablets every 6 hours continued for at least 48 hours after temperature has returned to normal and all evidence of the infection has disappeared. In more severe cases 3 or 4 tablets every 6 hours may be given.

GYNETONE REPETABS

Manufacturer—Schering Corporation Limited, Montreal, Que.

Description—A combination of hormones containing ethinyl estradiol (Estinyl) and methyltestosterone (Oreton-M). A repetab is a "divided-dose" tablet providing half the total dose for immediate absorption and the remaining half for absorption approximately 4 hours later. The repetab construction affords immediate and delayed action for prolonged therapeutic effect.

Indications—Treatment of the menopause, osteoporosis, and the management of geriatric patients requiring hormonal supplements. Particularly effective in these conditions without the masculinizing side-effect of androgens or uterine bleeding due to estrogens.

KOLANTYL Tablets and Gel

Manufacturer—Wm. S. Merrell Company, St. Thomas, Ont.

Description—Each tablet or 10 cc. Gel contains: Bentylol (dicyclomine) HCl 5 mg.; aluminum hydroxide Gel, dried 400 mg.; magnesium oxide, heavy, 200 mg.; sodium lauryl sulphate 25 mg.; Methylcellulose 100 mg.

Indications—Oral treatment of peptic ulcer and gastric hyperacidity with or without tendency to pylorospasm; promotes healing of peptic ulcer.

Administration—Two tablets or 2 to 4 teaspoonfuls Gel every 3 hours as needed.

MEPHEN-PLUS

Manufacturer—Webber Pharmaceuticals Ltd., Toronto, Ont.

Description—Each tablet contains: Mephenesin 0.25 gm.; salicylamide 0.25 gm.; butabarbital .0075 gm.

Indications—As an antispasmodic, analgesic-sedative. Has selective action on central nervous system, relaxant action on muscle spasm, spasticity, and rigidity.

Administration—1-2 tablets, three or four times daily or as directed by physician.

PROVELL MALEATE

Manufacturer—Eli Lilly & Co. (Canada) Ltd., Toronto, Ont.

Description—Each cross-scored "Disket" contains 0.5 mg. Protoveratrine A and B Maleates.

Indications—Treatment of any form of hypertension.

Administration—1 to 2.5 mg. daily, divided into 3 to 5 doses taken after meals and at bedtime. Must be individualized for each patient and used only under careful medical supervision.

Safety deposit vaults or boxes are commonly supposed to contain bond and stock certificates, insurance policies, title deeds and such valuable documents. Certainly that is what bank and trust company officials expect to find when they have to open them. There is, however, no arbitrary yardstick for measuring an individual's sense of value, nor any accounting for the human propensity to accumulate and store away. Bank officials in Boston opened up the safe deposit vault of a deceased lady to find it full of live ammunition, grenades, rifle cartridges, primers for big artillery shells, parachute flares as well as some gas masks and empty shell cases. They were sentimental souvenirs saved by the renter of the vault ever since she had been a Y.M.C.A. worker in World War I.

— *Selected*

Gentle restoration of "Habit Time"

Habit Time of bowel movement can be restored gently, provided organic pathology is ruled out, as it can be in many cases. Enemas and strong laxatives are put aside. A high residue diet is prescribed in cases of simple constipation, but spastic constipation may be aggravated by an excess of roughage. The patient must be made to understand the mechanism of defecation. He should learn to expect and obey the defecation reflex at the same time each day. He should be relaxed, patient, deliberate, even though this means altering his established schedule. The only physical aid he may require will be a prescription of emulsified mineral oil to soften hard, dry feces.

Petrolagar

Wyeth
Registered Trade Mark
WALKERVILLE, ONTARIO

- Petrolagar is miscible with organic matter, thoroughly impregnates the feces and is therefore less likely to cause seepage. It softens hard, dry stools so that they may be easily passed.
- Petrolagar fulfills the universal desire for comfortable bowel movement—soft, formed stools without griping.

FOUR TYPES—PLAIN, WITH PHENOLPHTHALEIN, WITH MILK OF MAGNESIA, WITH CASCARA

Complete protection

infantol

FRANK W. HORNER LIMITED

THE CANADIAN NURSE

L'Infirmière Canadienne

A MONTHLY JOURNAL FOR THE NURSES OF CANADA
PUBLISHED BY THE CANADIAN NURSES' ASSOCIATION

VOLUME 50 NUMBER 6

MONTREAL, JUNE, 1954

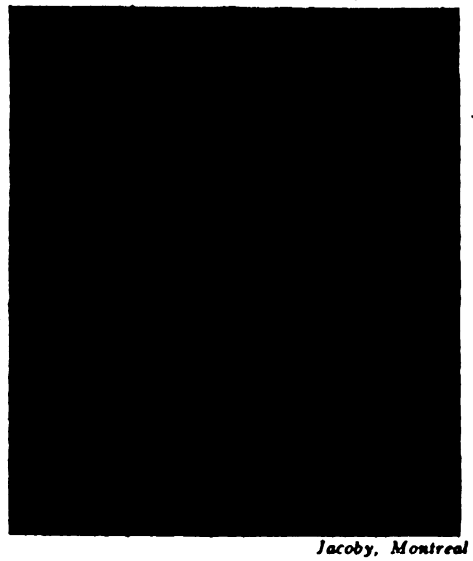
Changing Gears

HAVING new equipment with which to administer the affairs of the Manitoba Association of Registered Nurses is like replacing an old familiar nursing procedure by a strange new one. Despite the fact the procedure book of by-laws is in much simpler form than its predecessor, a period of orientation is needed. During this time, thinking is transferred into new channels. Gradually some dexterity is being acquired in using the new equipment.

Between 1913 and 1953 five modifications were made in our by-laws in the hope of revitalizing the former Act but it remained obsolete and inefficient. The new Act of the Manitoba Association of Registered Nurses is a modern, functional tool, applicable to the needs of the association. It has several new areas of responsibility, among which are: a practice clause and provision for district associations.

The inclusion of a practice clause in the Act gives the Association the legal authority to enforce requirements for qualification to practise in Manitoba. It is at once evident that this is both a protective measure for the public and for the registered nurse practising her profession. This dual need has been a grave concern of the nursing profession for generations; for example — an excerpt from an article in *The Canadian Nurse*, April, 1913, stated: "Unfortunately, there is no law that debars anyone from calling herself a registered nurse and practising as such."

The new Act has made district associations, within the provincial associa-



Jacoby, Montreal

EVELYN M. WATTS

tion, a legal possibility. Some members of the association have indicated their eagerness for this progressive step in reorganization. It is a good omen when the professional nurse is eager for district organization, for it shows her agreement with Earl S. Johnson's opinion stated in his article "Some Unfinished Business in Nursing":

> Nursing must act more boldly. It must have a mind and speak it clearly and forcefully. It must initiate more and follow less — because, of all professions serving the health of the people, it is closest to the people. (*A.J.N.* 50, 2:73).

Most of Manitoba's nurse population has been concentrated in the urban areas and in Greater Winnipeg particularly. Sociological changes have occurred here as elsewhere, and the establishment of small hospitals throughout the province has gradually brought about a wider dispersal of the association's membership. Mining developments in remote corners of the province have had a similar effect.

By district formation the isolating effect of great distance will be reduced. The membership in all areas will have direct representation on the Board of Directors. Mutual benefits will result:

(a) To the association from having the districts' voice, opinion, and direction.

(b) To the districts by having a representative who will return to them with current knowledge of nursing affairs of provincial and national importance.

Jean Henderson in her article, "Public Relations in Nursing", states: "The public must know about an organization, project or profession before it can proffer any real help." (*A.J.N.* 47, 8:517).

If all members are more fully aware of current nursing affairs, they will be more effective as public relations officers. A nurse's attitude toward her profession automatically moulds public opinion.

Before this is in print it is expected that the Legislative Committee will have drafted guide by-laws for the proposed districts. Each district will have had personal explanation of the significant factors by an informed member of the association's personnel.

Preliminary planning of the proposed geographical districts has been the work of a special committee. The Planning Committee for District Formation is at work on the many details involved in such reorganization. The formation of each district association will affirm the desire of the membership to participate and to share responsibility for their professional welfare.

The change in organization will create additional expense to the association in printing, stationery, and travel costs. It will be money well spent if it results, as it should, in a more active membership with a genuine interest in, and knowledge of, professional nursing affairs — in short, a revitalized provincial association.

EVELYN M. WATTS
President
Manitoba Association of Registered Nurses

Are door-to-door community health surveys of any real value? Is the survey conducted by relatively untrained, inexperienced, but interested people in the community worth the time and effort on the part of professional consultants — not to mention the citizen effort — that such a project demands?

In replying to these questions, the objectives of a health survey should first be considered. If the main objective is to discover facts relating to the status of health in the community, a self-survey may be of questionable value. If, on the other hand, the main objective is to bring about an awareness in the citizens of health needs currently not being met and to create an active desire on their part to do something to meet those needs — in other words, if the main objective is health education — then a self-survey can be very effective.

— MARGARET H. BLUTE

Poliomyelitis — Whence and Whither

J. D. ADAMSON, M.D., M.R.C.P. (E), F.R.C.P. (C)

THERE IS GOOD EVIDENCE that poliomyelitis paralysis has affected mankind for many thousands of years. Few diseases that we know of can produce crippling of one or both feet; throughout history, therefore, we suspect that those who were "crippled in their feet" were victims of poliomyelitis. Sir William Osler surmised that Mephibosheth, the son of Jonathan and the grandson of Saul (*Sam. II*: 4:4) was suffering from the results of poliomyelitis. Also, it is possible that when Homer described Vulcan's disability his pattern was taken from a case of polio. The well known disabilities of Lord Byron and Sir Walter Scott may both have been the result of poliomyelitis in childhood. This, of course, is mere speculation and there is more substantial evidence to prove that poliomyelitis is an ancient disease. Paleopathologists find definite evidence going back for thousands of years. There is, in particular, an Egyptian engraving dating back to 1600 B.C. which shows a figure with the classical wasting and the talipes equinus deformity of poliomyelitis.

Though it seems likely that poliomyelitis has been a sporadic disease for centuries, it must have been relatively rare. It was not described as a clinical entity till 1789. In that year, Dr. M. Underwood of London included an excellent account of the disease in "A Treatise on Diseases of Children.[9]" Among other things he says:

> The disorder intended here is not noticed by any medical writer within the compass of my reading, or is not so described as to ascertain the disease. It is not a common disorder, I believe, and seems to occur seldomer in London than in some other parts. Nor am I enough acquainted with it to be fully satisfied, either in regard to the true cause, or seat of the disease, either from my own observation, or that of others; and I have myself never had the opportunity of examining the body of any child who has died of this complaint.

Following this original account more and more cases were described in the medical literature. Until 1836, when Sir Chas. Bell[1] made the first reference to an epidemic, it was a rare sporadic disease that was truly infantile and largely confined to the lower limbs. From that time forward it became more common and much attention was given to a search for the cause. It was, of course, variously ascribed to teething, worms, scrofula, malnutrition, fatty degeneration of the muscles, etc. In the absence of any exact cause it was for many years called "the essential paralysis of children."

During the past 100 years various aspects of poliomyelitis have occupied the attention of all the most famous internists and pathologists. The first important contribution to the true pathology was supplied by Duchenne[4] in 1854, who established the identity of the disease in childhood and that in adults, which were previously thought to be separate entities. The name of J. von Heine is commonly associated with the most thorough clinical accounts. Between 1840 and 1860 he published several papers in which he discussed all aspects of the disease. He was convinced, from physiological considerations, that the lesion was in the cord. In 1870 Charcot[3] definitely established that the main lesion was in the anterior horns, especially at the cervical and lumbar enlargements.

By 1880—100 years after Underhill —all textbooks gave an account of the disease which by then had been universally called "acute poliomyelitis" on the suggestion of Kussmaul. Over 200

Dr. Adamson, who is chairman of the Medical Advisory Committee to the Minister of Health in Manitoba, is professor of medicine at the University of Manitoba.

articles had been published; the seasonal incidence had been referred to, evidence of infectiousness had been produced, several small epidemics were reported, involvement of the arms and the facial nerve had been described and it was known that changes in the electric excitability of the muscles took place. The situation about that time is well summarized by A. B. Massey[7]:

> Hospitals usually do not see cases in first stage of infantile paralysis, hence it is the general practitioner's responsibility to properly treat the initial stage. The main diagnostic points are:
>
> 1. Sudden motor paralysis subsequent to fever, possibly in its absence.
> 2. Absence of any disturbance of sensibility.
> 3. Absence of paralysis of bladder or rectum.
> 4. Absence of marked cerebral disturbance other than that due to the febrile condition.

Since that time the clinical manifestations have changed remarkably: bladder and cerebral involvement are now quite common.

The most interesting feature in the history of poliomyelitis is the fact that, from having been a relatively rare sporadic disease it has, in the past 60 years, gradually become the most damaging of all the epidemics with the possible exception of influenza. Though epidemics were described from time to time since Bell's first account, these were, till recently, small and infrequent. In 1890, O. Medin[8] published the first full account of epidemics which had been specially studied in Sweden. Since then they have become larger and more frequent in all civilized countries. The first large epidemic on this continent was in New York City in 1907-8 (2,000 cases).

In Manitoba the first recorded epidemic was in 1918 when 73 cases were reported and no doubt a great many more actually occurred. Since then we have experienced six large epidemics of gradually increasing frequency and severity, culminating in the 1953 epidemic which reached the unprecedented proportion of over 300 per hundred thousand (2,400 cases). It is curious that the British Isles escaped large epidemics until 1947 since when there has been an annual attack.

It is a disturbing paradox that, in general, as public health facilities are improved, and as the common infectious diseases become less prevalent, poliomyelitis epidemics become more common. Among uncivilized races where no precautions against spread of disease are taken epidemic poliomyelitis is unknown. Also, in those countries where medicine has been most backward, epidemics are least frequent. One is tempted to subscribe to the implied proposition that the incidence of poliomyelitis measures the efficiency of public health practices. Though this is true in a broad sense, it would scarcely be accepted by our cousins in Britain nor by Russian scientists, who confidently ascribe the alleged absence of epidemics in their country to preventive measure, the details of which remain undisclosed.[10]

Since Flexner and Lewis[6] in 1909 first reported that the infecting agent of poliomyelitis "belongs to the class of minute and filterable viruses," there has been much research, especially in the United States. In spite of this, progress till recently was slow and, as Thos. M. Rivers has remarked, it is still hard to know whether we are discussing "organules" or "molecisms." Within the past ten years encouraging progress has been made which may be summarized as follows:

> 1. Three distinct types of virus have been recognized, namely—Brunhilde, Lansing, and Leon; the first of these is the most common cause of epidemics on this continent. Infection with any one of these produces immunity against it, but not against either of the others.
> 2. It has become possible to cultivate the viruses in test tubes; previously growth could be demonstrated only in a few living animals—in most cases monkeys.
> 3. With the newer methods, vaccines that appear to protect monkeys have been elaborated, giving rise to a justifiable hope that an effective vaccine may soon be available for humans.
> 4. It has been shown (Hammond *et al*) that the gamma globulin fraction of pooled human blood contains antibodies in sufficient quantities to confer partial protection for a period of five weeks.

The treatment of poliomyelitis has followed the general trends of therapeutic fashions as in any other disease in which there is no specific remedy; there have been literally hundreds of alleged cures. Even in our enlightened day, every epidemic brings out a multitude of "sure cures" from medical and lay sources. This follows from the fact that during an epidemic a great many minor self-limited infections are diagnosed as polio and promptly "cured" and also from the fact that polio itself has a most gratifying tendency to recovery if harmful interference can be prevented.

During the last 10 years of the last century, polio became an orthopedic disease. This arose from the fact that most cases were not recognized till grossly paralyzed or deformed; also it was part of the universal tendency to surgical treatment. From that time till about 20 years ago, complete rest (in splints or casts) was commonly prescribed. This also was in line with contemporary opinion that rest cured all ills. The resulting deformities were treated by a great variety of remedial operations—tendon transplants, etc. The idea that the paralyzed muscle should be exercised and not rested after the acute stage began to become popular about 30 years ago.

This period of re-education and exercise for paralyzed muscles was climaxed by the aggressive activity of Sister Kenny of Australia who vigorously attacked "orthodox treatment," especially immobilization. Unfortunately she complicated the picture by ascribing her results—which were good—to the hot packs that were a special feature of her regimen. Her methods of muscle re-education were more meticulous than those that had been prescribed previously. Her methods received widespread publicity and have succeeded in popularizing the fact that re-education and not rest is the best treatment for the paralyzed muscles. Her original plan of massive hot packs during the acute stage has in general been given up except for rare cases with much spasm or severe pain.

There are many details of treatment about which various groups still do not agree but, in general, the following principles are recognized:

1. During the febrile period, before paralysis has appeared, and therefore before the diagnosis is certain, absolute rest and tranquillity are the main indications. During that stage the patient is suffering from a generalized infection and his fate hangs on a very sensitive balance. It is generally accepted that activity during this stage increases the chance of paralysis. During an epidemic, therefore, all children who have suggestive signs or symptoms should be kept strictly in bed till the temperature and pulse have been normal for four days at least.

2. When paralysis becomes evident the first indication is, still, rest. This can usually be best done in the home. The turbulence, fear, and excitement that attend a trip to hospital can do much harm. Being thrust into a completely new and often unhappy environment can unquestionably work to the disadvantage of the patient. Much physical examination, including lumbar puncture, can also be harmful. Cases in which there is any suggestion of bulbar or respiratory involvement (difficulty in swallowing or breathing) should certainly be taken to hospital and some cases in which meningitis or other serious disease is suspected must also be brought in for lumbar puncture and other investigation. During the acute stage (i.e., while there is still fever, irritability, and much pain and tenderness in the muscles) the patient should be allowed to lie in the most comfortable position. Gentle passive movements may be started as soon as tenderness and pain will allow.

3. After the acute stage and when the extent of paralysis has been defined, re-education should be commenced by a physiotherapist under the supervision of a physician of experience.

4. In the majority of cases the appropriate exercises can, after a short time, be continued by the patient with

the help of some member of his family with occasional professional supervision. It is important, for the final rehabilitation of the patient, to insist on his family assuming some of the responsibility as soon as possible. The sooner a patient finds his level in his own environment the better. Long retention in hospital should be avoided as much as possible, especially for young children.

The future of poliomyelitis is difficult to predict. Throughout this continent epidemics are becoming more frequent and more severe. In Manitoba large outbreaks occurred in 1918, 1928, 1936, 1941, 1947, 1952, and 1953. The spacing of the first six epidemics was similar to what was occurring in other provinces and states and in other countries in comparable latitude. It was felt that each epidemic created a relative immunity for a period of years. This theory is no doubt partly true. The more cases that occur, the greater the number of the immune. The enormous epidemic of 1953, therefore, came as a surprise. The 1952 epidemic was one of the largest and most widespread in the history of Manitoba (over 100 cases per 100,000 population). In spite of that, the rate produced in 1953 is unprecedented in any other province in Canada. Similar unexpected attacks have been seen in some of the states and in other countries.

The epidemiological reasons for this change in pattern are obscure and one can only speculate about the future. The experience in England and Wales is often cited to show that an epidemic does not necessarily confer immunity. It is pointed out that there were no epidemics there until 1947, since when they have had one every year. However, if one studies the incidence, it is found that the total rate was only 57 per 100,000 for the four years from 1947 to 1950. Also, cases have occurred as local outbreaks varying widely in locality from year to year. What Great Britain has really had is not a series of general epidemics but a number of relatively small and often widely separated epidemics each year. The total incidence is not large enough to produce an effective general immunization. In contrast to this, Manitoba had over 3,200 cases during 1952 and 1953, which is a rate of over 400 per 100,000. Also there has been no part of the whole province that has escaped. If one accepts the proposition advanced by some epidemiologists, that for each case diagnosed, there are 100 infected, then we have had 320,000 people immunized in the past two years. This is nearly half of the total population of the province. Many thousand older people also carry immunity from previous epidemics. If this reasoning approaches validity, then Manitoba should not have a large epidemic for some years to come.

However, other factors enter into the equation. The number of foci of infection that persist from the previous epidemic may have an influence. There is no practical method of discovering these. It is known that the stools may remain positive for many weeks after infection, whether or not the subject has had the clinical disease. One may presume that when the previous epidemic has continued with a few cases through the winter, as was the case in 1952-53, the number of foci will be greater when spring comes. Also there is no doubt that heat and moisture during the spring and early summer are conducive, for some reason, to epidemics.

To determine the precise relationship between meteorological conditions and epidemics is an intricate statistical problem. Many observers have shown an association between heat and humidity and the incidence of epidemics. No one has been able to be so specific as to predict epidemics. The best study that I know of was made by Bradley and Richmond in England[2]. They made a detailed correlation between temperature and humidity and incidence of polio from 1947 to 1952. They concluded:

1. No epidemic commenced until temperature and humidity had reached a particular level (i.e., dry bulb/vapor pressure readings of 49/9.0).

2. There were many instances in which no increase in poliomyelitis occurred even though temperature and humidity exceeded this level.

3. The autumnal drop in case incidence always commenced while the temperature and humidity exceeded that quoted above. This seemed to have no influence on the rate of fall.

4. The variation in incidence during an epidemic is not related to variations in D.B./V.P.

5. It is not possible to predict the onset or course of an epidemic by these measures.

Preliminary studies of this problem in Manitoba show that each epidemic year has been hotter and/or more humid than average. However, some hot moist years have failed to produce epidemics. At present, therefore, we can only say that weather conditions may be the trigger that fires an epidemic but the epidemiological gun must be loaded in order to fire; the "load" in broad terms consists of the concentration of susceptibles in the community and the number of foci of infection that happen to be present.

If poliomyelitis infection follows the same course in other provinces as in Manitoba, there will be a great increase in the number of cases in the near future. Indeed, the course in Alberta and Saskatchewan has already shown the same tendency as in Manitoba. These facts do not necessarily mean that the same enormous increase will be encountered in other provinces. Epidemiological conditions are quite different, for instance, in Quebec. Also gamma globulin will unquestionably have some effect and it seems almost certain that within a few years, a safe and effective vaccine will have become available.

References

1. Bell, Chas. The Nervous System. Green and Longman. 1836.
2. Bradley, W. H. Richmond, A. E. *Monthly Bulletin*, Ministry of Health Laboratory Service. 12:2, 1953.
3. Charcot, J. M. *Rev. phot. de hôp. de Paris*, 4:1, 1872.
4. Duchenne, G., B.A. *Bulletin Acad. de Méd.* 19:1055, 1854.
5. Enders, J. R. *et al. Science*, 109: 85-87, 1949.
6. Flexner and Lewis. *J.A.M.A.*, 53: 2095, Dec. 18, 1909.
7. Massey, G. B. *Philadelphia Medical Times*, 14:501, 1883-84.
8. Medin, O. *Hygeia*, 52:657, 1890.
9. Underwood, M. A Treatise on Disease of Childhood. Matthews, London, 1789.
10. Vinokouroff, Prof. Konstantine. Report of 2nd Inter. Polio Conference, p. 151, Lippincott, 1952.

In the Good Old Days

(*The Canadian Nurse* — JUNE 1914)

"ONE WOULD THINK that the mammary gland was some unknown and recently discovered structure, if one were to judge by the general ignorance that seems to prevail about it. Its function is no more likely to fail, given normal necessary physiological stimuli, than the function of the salivary glands or the liver . . . If the doctor took as many pains to teach the baby to nurse, as he does in asphyxia neonatorum to teach the baby to breathe, then the reproach of our infant mortality records would be largely taken away . . . For the deaths of thousands of babies are due to this one simple fact — they were not mother-nursed."

* * *

"The value of nurses' conventions is to afford them opportunities for mutual understanding and instruction, and for improving *esprit de corps*. Many nurses, in joining associations, are too prone to inquire what the cost will be and what good they will receive, rather than what they can do to help forward the work of the Association."

* * *

"The straight eight-hour day for nurses, where it has been tried, has not been found good for young girls, as the labor demanded is too constant and too hard. The considerate matron, under the present arrangement of broken hours, has a much better opportunity to arrange things so that no nurse is overworked."

* * *

Nursing Care of Patients with Poliomyelitis

F. Lillian Campion, M.A.

Under the sponsorship of the Manitoba Department of Health and Public Welfare and the Manitoba Association of Registered Nurses, an institute of poliomyelitis nursing was held in Winnipeg, March 8-12, 1954.

Miss Barbara Williams, consultant, Nursing Advisory Services for Orthopedics and Poliomyelitis, National League for Nursing, New York, conducted the course. Others who participated in the program were: Dr. M. R. Elliott, Dr. J. Hildes, Dr. Graham Pincock, Dr. H. Medovy, Dr. J. D. Adamson, Dr. J. B. R. Cosgrove, Mr. Lloyd Lenten, Miss Mary E. Wilson, and Mrs. Gloria Sterin.

The writer was privileged to attend this institute and the following material is based largely on the discussions held there, supplemented by readings.

In considering poliomyelitis nursing, two things need to be emphasized:

The basic principles of good nursing care, as applicable to any patient, must be applied to the nursing care of patients with poliomyelitis. Therefore, polio nursing should not be considered a specialty but as one of the fairly common diseases requiring expert nursing care.

It is the *individual* suffering from poliomyelitis, not a *case* that is being nursed.

Nursing patients with poliomyelitis has been thought difficult because of the things we do not know about it and the many fears and misconceptions that have arisen. Nurses should be well informed about the disease; about the recent advances in knowledge and the development of immunology; and, more especially, about the medical treatment and nursing care in order that they may feel secure and so be able to give high quality nursing care. The nursing problems that arise in caring for these patients are basically very similar to those encountered every day. However, the total nursing needs of polio patients may exceed those of patients suffering from many other illnesses. Thus the nurse must be able to evaluate these total nursing needs and use her knowledge, imagination, and ingenuity in meeting them. Actually, this makes the nursing of these patients even more challenging and satisfactory.

It is not the purpose of this article to discuss every detail of the nursing care of patients with poliomyelitis but to point up some of those problems which may be less familiar and, therefore, seem more difficult.

Miss Campion is secretary of nursing service with the Canadian Nurses' Association, Montreal.

The Disease Process

Poliomyelitis is an acute communicable disease caused by a virus which is resistant to the present antibiotics. There are known to be three different types of virus causing poliomyelitis, which is why a person may have more than one attack.

The virus enters the body through the nose or mouth and, most probably, enters the gastrointestinal tract where it grows and multiplies. It passes through the tissues into the blood stream causing a virusemia and consequent fever. It may then invade the central nervous system, attacking the nerve cells which may be either damaged or destroyed. As the motor cells in the brain and spinal cord which innervate muscles are attacked, muscle weakness and paralysis become manifest. The muscle fibres themselves are not damaged by the virus but the destruction of the nerve cells renders them useless. Just a few muscle fibres may be affected or whole muscles, depending on the extent of nerve cell involvement.

The body develops antibodies which destroy the virus. These may be sufficient to overcome the virus at any stage of the illness. The disease is self-limiting as these defence mechanisms overcome the disease process and the patients are left with varying amounts of paralysis.

The amount of recovery will depend on the extent to which the nerve cells are damaged or destroyed. This cannot be determined during the acute stage. If the nerve cells are not destroyed, they will regenerate and the nerve fibre reaching the muscle will gradually resume its function. It is highly important that the muscle bulk be protected until the nerve fibre has recovered.

Types

The three types of poliomyelitis are differentiated according to the area of the central nervous system affected:

1. *Lower spinal* — includes the lower trunk and extremities and the urinary bladder.
2. *Upper spinal*—the upper trunk and extremities, including muscles of respiration.
3. *Bulbar* — affecting nerve cells in the medulla and involving the muscles of the face, eyes, larynx, pharynx.

In any of these three types there are three stages—acute, convalescent, and chronic. In each stage a positive attitude should be taken by all who come in contact with these patients, emphasizing what *they can do,* rather than what they cannot do.

Acute stage: The symptoms may be very mild and not considered important or they may be very marked. They include: fever, general malaise, sore throat, nausea and vomiting, headache, loss of appetite. This is the systemic phase. It may last only a day or so; then for the next one to seven days the patient seems well. When he becomes ill again meningitic symptoms may develop, indicating involvement of the central nervous system. The muscles become sore and stiff. He becomes irritable and apprehensive. Muscular weakness, or paralysis with muscle spasm and rigidity, develops in the paralytic stage.

Convalescent stage: Begins when the temperature drops to normal. It is during this stage that the muscles will recover their functions and their re-education begins. The patient may be permitted to return home or he may remain in hospital if intensive medical and physical therapy is indicated. The nurse can contribute much to stimulate the mental activity of the patient at this time and so prevent boredom and depression.

Isolation

The virus is found in the nose and throat secretions and feces of an infected person. Its exact mode of transmission is not known. When several members of one family are stricken, it is more likely that they have been infected from the same source and not from one another. How long a patient is infectious is a controversial question. Authorities differ regarding the need for isolation and the length of the isolation period from no isolation to four weeks. This problem will be decided by the medical profession and local health authorities. The average isolation period seems to be 21 days from onset of symptoms.

The isolation technique set up by the hospital should be planned by all those concerned, including doctors, nurses, administration officer, and housekeeping department, so that there is full understanding and follow through. It should be a safe technique, kept as simple as possible, with clean and contaminated areas clearly defined, and so planned that it can be carried out satisfactorily by busy nurses. As in any isolation technique, cleanliness of the hands is most important. Running water or some safe way of caring for the hands is an essential item in setting up an isolation area. Group isolation may be quite safely carried out. Whatever the procedure planned, it should be clearly written and made available so that all concerned know and understand the technique to be used.

The virus is excreted in the feces which are, therefore, a most dangerous source of infection. In urban areas where there is adequate sewage disposal, it is quite safe to empty bedpans into the toilets without preliminary disinfection. In rural areas, chloride of

lime, 5% in equal parts, or 10% Lysol for two hours, kills the virus. Individual bedpans should be provided.

Visitors, if allowed during the isolation period, should be properly instructed and supervised.

Nursing Care in Spinal Type Poliomyelitis

In the general spinal type an entire extremity may be paralyzed or there may be complete or partial paralysis of any one muscle or any group of muscles, with contraction of the opposing muscle or groups of muscles. There is frequently general muscle tenderness and often severe and troublesome pain, due to muscle spasm. Muscle contraction is not necessarily painful until the patient or someone else attempts to stretch the contracted muscle. Treatment is directed toward the relief of pain, the prevention of deformities, and the restoration of function.

Relief of pain: The common analgesics such as aspirin and codeine may be ordered but hypnotics are not given in the acute stage because of the danger of depressing vital centres in the brain.

Heat is often useful in relieving pain. Moist heat is more penetrating and, therefore, more effective than dry heat. Whichever form of heat gives the most comfort and relief to the patient should be used. If he resists or rejects one form of treatment, little will be gained and another method should be tried.

Experiments have shown that when heat is applied to a muscle area the temperature within the muscle rises during the first 10 minutes and then levels off. If a second application of heat is then made there is a further rise during the next 10 minutes, the maximum temperature being reached at the end of the 20 minutes. The effect lasts about two hours. Therefore, the most effective technique is to apply heat for 10 minutes, replacing it immediately by another application for 10 minutes, at three-hour intervals.

Hot moist packs may be applied to relieve pain and spasm or to prepare the muscles for further treatment, usually by a physiotherapist. Hot packs have no effect on the disease process nor on weak muscles. Most patients get along very well with three applications a day given at approximately 10:00 a.m., 3:00 p.m., and 8:00 p.m. However, when a patient is having considerable pain, a p.r.n. order is preferable as further applications may be required, especially during the night. The doctor will order the frequency and duration of hot packs.

Packs should be light in weight, absorbent and soft. They may be cut from old woollen blankets (not army blankets as they are too heavy and harsh). *Munsingwear* makes very satisfactory packs prepared in four thicknesses for inner packs. The pieces should be large enough to cover the area desired but should not restrict the action of the joints. They should be applied as hot as the patient can comfortably tolerate them. Packs may be laid on or wrapped and pinned. If the outer pack and the waterproofing material are cut the same size and stitched together, they are easier to apply and time is saved. Triangular packs are used for shoulders and thighs, while those for hands, arms, legs, and back are rectangular.

Care of the skin: After the packs are removed, pat the skin dry and replace the usual bedclothes. No extra weight is required. The skin should be washed at the end of the day to remove any fuzz that may have adhered to the skin. Powder or cream should not be applied to the skin when packs are being used.

The use of tub baths for the application of heat has advantages and disadvantages. An ordinary tub is quite satisfactory for children. The water is buoyant and will support the part and permit movement. However, the patient may be too sore and tender to be lifted into a tub. If the tub is at floor level, it is usually too difficult to get an adult patient in and out of it.

If a tub bath is used, the water should be started at about 99° F. and increased, as the patient tolerates it, up to 101° for about 10 minutes. The doctor will order the degree of heat and the duration. The patient must not be left alone and his color and pulse rate must be closely watched. Cold

cloths should be applied constantly to his head and cold drinks given while he is in the tub.

During epidemics, pack teams may provide better service so schedules should be planned by the team, the nurse caring for the patient, and the physiotherapist so that no one interrupts the work of the others. Physiotherapy treatment, where ordered, should follow within an hour of the application of the pack.

Hydrotherapy is used extensively in the convalescent stage under the direction of the physiotherapy department.

Position and Support

The same principles should be observed as in nursing any orthopedic patient. The nursing care the patient receives during the early stages will influence the degree to which he will be able to use his muscles later. Therefore the nurse should be on guard to prevent overstretching of paralyzed or weak muscles, joint stiffness or joint deformity. Muscles work in opposing groups and when there is a weak or paralyzed muscle, there is apt to be contraction of the opposing muscle or groups of muscles which may result in a permanent overstretching of the weakened muscle. If unnoticed this may result in a fixed contracture.

The amount of paralysis reaches its maximum in the acute stage. It is impossible in either the acute or early convalescent stage to determine how much of any paralysis will be permanent. Therefore, medical treatment and nursing care should be planned on the premise that *all involved muscles will recover.*

Good body alignment is important in caring for any patient with paralysis who is confined to bed for long periods. Foot-boards, pillows, hip rolls, hand rolls, sandbags are necessary in maintaining good body alignment. As his position should be changed at least every two hours, these supports should be adjusted to maintain neutral alignment as far as possible. The mattress should be firm. A fracture board may be placed under it to ensure essential firmness. The board should be hinged to correspond to the Gatch frame of the bed. A thin strip of sponge rubber mattress may be added to provide extra comfort. Whenever giving any care, place the patient in good position.

Careful planning by attending physicians, internes, and nurses is necessary in order to minimize the amount of handling of patients, especially during the acute, sensitive phase. Gentle, adequate support is most important. Always place the hands under the joints. Never take hold of the muscle belly.

Bed baths are *not* necessary on admission; nor is back care of particular importance during the acute stage. The patient is too sore all over to be unnecessarily handled at this time. Later, skin care is very important.

Placing the patient on a bedpan is a problem. The arching of the back to slip a pan underneath can be very painful. The patient should be turned on his side while pillows are placed below and above the pan. The back will then be well supported when the patient is rolled onto the pan.

Rest is most important. Never waken the patient for treatment unless he is acutely ill and the nurse is concerned about the state of consciousness.

Passive exercise: The doctor will order the special exercises he wishes the patient to have. These are usually carried out by, or under the direction of, the physiotherapist. However, the nurse does have a responsibility in so far as passive motion is concerned. At least twice a day she should move any part that the patient cannot move and thus give full motion to affected joints. The part should be moved to the point of discomfort but not beyond. While she is giving some other treatment, such as bathing the patient or giving evening care, she has an opportunity to help prevent joint fixation and muscle atrophy. This is applicable not only to a bed patient but is equally important when he is up in a wheel chair. He should not be left in sitting position all day without movement and exercise of his joints.

Nursing Care in Bulbar Poliomyelitis

As noted earlier, the nerve cells in the medulla are affected. The paralysis involves the muscles innervated by these nerves. If the face and eyes are affected the patient must be closely observed for any indication of the involvement of other muscles.

In palatal and pharyngeal muscle paralysis, the patient develops a nasal voice, nasal regurgitation, and difficulty in swallowing. As this difficulty increases there is an unusual amount of drooling and spitting. Thick, tenacious mucus may collect in the patient's throat causing gurgling, bubbling sounds. This is usually attended by restlessness, apprehension, elevated temperature, increased pulse rate, and color change—flushing, pallor or cyanosis. Changes in the state of consciousness may also occur, the patient becoming stuporous.

The staff who will care for these patients should be carefully selected as they are restless, anxious, unable to sleep, and lifesaving emergencies may arise at any time. The nurse must know and understand the symptoms. She must be observant and dependable, able to give sympathetic care while remaining calm and reassuring. She must know the use and care of all the emergency equipment.

Postural Drainage

The most important nursing procedure is to maintain a clear airway, to keep the saliva and mucus aspirated to prevent obstruction and asphyxiation, and to prevent aspiration by the patient. If he is not in a respirator and there is no respiratory involvement, he may be postured to allow the secretions to drain out of his mouth. He may be placed in a prone position, side-face position, or in the Trendelenburg position. In an acute emergency, the nurse should bring the patient quickly to the side of the bed and, dropping to one knee, let his head and shoukders hang over the side of the bed, the shoulders resting on her knee. She should support the patient with one hand. leaving the other hand free to use the suction.

If the patient is in the Trendelenburg position, a pillow should be placed at the head of the bed. There is a risk he may develop edema of the forehead, even edema of the brain. Therefore the doctor may advise putting him flat for definite periods. If a nurse is responsible for more than one bulbar patient, it is wise to have only one flat at a time in case an emergency situation arises.

Suctioning

If a patient is not too ill or too tired, he should be encouraged to do as much as he can for himself. If he is taught to handle his own suction early he is better prepared for an emergency. Any patient over seven years of age can be taught to suction himself.

Suctioning should be done only when necessary. A soft catheter with multiple holes is preferred. Do not use a metal catheter because of the danger of trauma. If the catheter is cut at an angle and the edges flamed, it will be less likely to be closed off by pressure against the wall of the pharynx or mouth. The suction should be running with the tube pinched off as it is being inserted.

To loosen thick secretions that are adhering to the pharynx, have a glass of water or saline and a medicine dropper at hand. Put a few drops in the back of the mouth immediately before suctioning.

Preferably suctioning should be done through the mouth but if necessary the patient may be suctioned through the nose. There must always be a quick method of relieving the airway on hand.

Emergency equipment which should be available includes:

> Bronchoscope, laryngoscope, tracheotomy sets, humidified oxygen, Trendelenburg pins or blocks, suctioning apparatus, emergency stimulants, emergency airways such as Mosher lifesaver, resuscitator or positive pressure mask.

If the patient is in a respirator, the risk is even greater. He cannot be postured and, therefore, he may become cyanosed, choke and die before he can be treated.

Tracheotomy may have to be performed.

Feeding

During the acute stage, the patients are unable to take anything by mouth because of the inability to swallow and the danger of aspiration. Continuous intravenous fluids may be ordered. Usually, if three small intravenous injections are given during the day it is not necessary to disturb the patients at night.

It may be necessary to resort to gastric tube feeding but as few feedings as possible should be given this way because, if time is taken, the patient will eventually return to his normal eating habits.

The electrolyte balance is very important. The patient may lose up to a liter of saliva in a day. Careful control of intake and output is most important and very essential.

The patient may begin swallowing when he is asleep. The nurse should be alert for any sign of when the patient is ready to start feedings. The usual indications are:

> The temperature is normal. There is no nausea and vomiting. The patient is interested in swallowing and is able to handle his own secretions. Sight and smell of food may encourage him.

When the patient is ready to start, he may be given a piece of ice or even a lollipop to suck. If possible, the patient should be well supported in a sitting position in order to facilitate swallowing. A half teaspoonful of water may be put in his mouth by means of a dropper, tube, or straw. The amount of fluid should be increased gradually up to two ounces every half-hour. Let the patient choose what he prefers, warm or cool fluids such as water, tea, ginger ale (no effervescence!), progressing later to skim milk. When this is handled satisfactorily, the diet may be increased to five small meals a day, giving more in the morning and less later in the day. The supper should be a very light meal. Let the patient know it is to be expected that he will choke a bit at first so that he is not too discouraged. However, do not leave fluids beside him as he might try to drink when unattended.

It is essential that a suction machine be immediately available when feeding these patients, until they are well able to handle food. Mouth care is also very important.

A Patient in a Respirator

Respiration is the movement of air in and out of the lungs due to changes in pressure in the thoracic cavity. This change in pressure is brought about by the expansion and contraction of the thoracic walls in response to muscle contraction. The diaphragm is the most important muscle of respiration.

The decision to place the patient in the respirator is a medical one but the nurse must be alert to observe the early signs of respiratory difficulty. These include:

> Increased respiratory rate, shortness of breath, the use of the accessory muscles of the neck, flaring of the nostrils, restlessness, anxiety and apprehension, fretfulness, emotional disturbance, weakened voice, inability to say more than a few words without pausing for breath, and inability to cough. The pulse rate and blood pressure may rise and the patient become drowsy, confused, delirious with circumoral twitching, and cyanosis.

The nurse should be thoroughly familiar with the details of the respirator she is to use. The principles are the same for all types but the details will vary with the make of the machine and the model. All the staff should know how to operate the respirator by hand in case of failure of the electric current.

When the respirator is used for the first time, the nurse must be calm and reassuring. She explains to the patient what is happening and why, if time and his condition permit. She should tell him that the muscles of respiration need rest and that the machine will do the work for them. Let the patient know that his breathing will be different and that, at first, he will find it difficult to talk and swallow until he adjusts to the cycle of the respirator. He should be instructed to talk as he breathes out and to swallow either

at the end of an inspiration or of an expiration. Tell him to hold food or fluid in his mouth until it feels comfortable to swallow. Above all he must be reassured that the respirator is a mechanically good device and that he will never be left alone while he is in it.

The medical staff will order the rate and amount of pressure to be used. It should be kept to the minimum amount necessary for the comfort of the patient. Usually a pressure of negative 13 to positive 2 will suffice. However, the pressure required will be individual and will be influenced by various conditions such as the degree of fever, extent of muscle involvement, the tightness of the muscles, the body type and age of the patient, the state of fatigue, the altitude, and how clear the air passages are.

The control of the rate and pressure of the respirator is most important as it is possible to "breathe the patient" too much—that is, to hyperventilate him if he demands more air than he actually needs. This will result in flushing of the face, headache, dizziness, drowsiness, even loss of consciousness. After the patient has been placed in a respirator, there may be further involvement of the muscles so that continued, intelligent observation is important.

Good teamwork is most essential in giving nursing care to patients in respirators. Most patients can be removed from the tank for short intervals for baths, change of linen, and care to the back. Three or four people working together can do this quickly and skillfully so that it will be less tiring for the patient. If the patient cannot do without the machine, nursing care must be given through the arm ports. The needle on the gauge should be at zero when going into the ports. It may be necessary to increase the negative pressure to compensate for the loss of pressure while the ports are open.

The relief of pain and the prevention of deformities are just as important for patients in the respirator as for other types of poliomyelitis. Positioning of the patient and passive movements should be carried out as much as possible. If packs are applied to the chest, they should be very light in weight and as hot as the patient can tolerate them.

Special attention should be paid to the neck which, if not carefully looked after, may become a very troublesome problem. A soft worn diaper, or a piece of chamois skin, placed loosely around the neck as padding for the rubber collar is very satisfactory. The head piece should be adjusted at the most comfortable height to prevent undue strain. The patient's shoulders should be in contact with the head-end of the tank or the rubber collar will be immediately under his chin and consequently very troublesome. The collar should be as near the clavicle as possible. Sponge rubber shoulder pads should be used to protect the patient's shoulders from pressure against the metal side of the tank.

A patient in a respirator should not be turned on his abdomen without a doctor's order. He may be turned from side to side. Always he must be kept in good alignment and well supported.

Weaning the patient from the respirator should, in principle, begin as soon as he goes in. However, with an acutely ill and febrile patient, this may do considerable harm. The doctor will say when, how long, and how often he should be out of the respirator. The nurse must carefully observe and record his reaction and use good judgment in deciding when he needs to go back quickly and when to encourage him to stay out longer. She should always be confident, sympathetic, and reassuring so that the patient has a feeling of security. He will be unable to speak or indicate that anything is wrong so that the nurse must remain by his head while the cot is out of the respirator, and observe him closely for any signs of difficulty, such as flaring of nostrils, increased pulse rate, and cyanosis.

The first step in weaning the patient from the respirator is to open the port holes with the motor running, thus reducing the pressure. The patient will not be nearly so apprehensive. Each day the time should be increased

until he is able to be completely independent of the machine. The nurse should provide some diversion so that he is not conscious that the period of time is being lengthened.

Diversional therapy is very important in the care of these patients and the nurse's ingenuity is really tested in planning for it. The occupational therapist, family, and community should all be utilized in figuring out new ways of interesting and stimulating the mental activity of the patient. Many gadgets have been devised that are helpful, such as glass shelves upon which an open book can be placed (the attendant must turn the pages), phonograph, radio, television, mirrors to enlarge his range of vision, chess and checker games, etc.

Chest respirator: This is useful in weaning patients from the tank. In many instances this type of respirator is all that the patient needs. This permits more freedom of movement for the patient and makes nursing care easier.

The rocking bed: This is another very useful aid in facilitating the care of patients with paralysis of the respiratory muscles. The bed seesaws on two rockers. It requires alternating current and may be made to use either 110 or 220 volts. It may be adjusted to allow hand operation if there is a failure of power. As the head of the bed goes down, the abdominal viscera push against the diaphragm and aid expiration, then as the foot of the bed goes down and the head elevated, the abdominal organs shift downward, encouraging the downward movement of the diaphragm and so favoring inhalation. The patient should be taught to inhale as the head of the bed rises and exhale as it falls. Speaking is easiest as the head is going down and the air is going out through the larynx.

When feeding a patient on a rocking bed, food should be placed in the mouth when the bed is in the up position. The patient is taught to chew the food while the head is going down and to swallow as it reaches the up position.

Convalescent care: The choice of the nurse is just as important in this phase of the illness as in the acute stage. Her attitude is very important. She must know each individual patient —which one to urge to greater effort —which to restrain. She must be able to get along well with people, as teamwork is so essential.

Nursing Care of a Patient in a Respirator

BARBARA MONTIZAMBERT

POLIOMYELITIS! The very word arouses terrifying associations in us all! Today more than ever before we realize the impact this disease has on society. No longer does it discriminate! It strikes adults and children alike. Neither does it limit its ravaging effects to one community nor confine its time to the late summer months. Stranger still is its lack of consistency. Why does it strike one member of a household and not another?

Miss Montizambert is engaged in private nursing in Toronto.

Today it is a leading problem and with experiences of last year still fresh in our minds medical research carries on with experiments with gamma globulin and the new vaccine. Equipment is being perfected, facilities for hospitalization increased, and more detailed knowledge of the disease is being absorbed by the public but what of nursing care? Do we all know as much as we should about the problems of nursing the patient in a respirator?

The patient, being helpless, is completely dependent on, first, his respira-

tor, which virtually breathes for him; and second, the nurse in attendance.

The Respirator

All respirator equipment is basically simple and the nurse only requires a short period of personal examination of the machine and an explanation from someone who has operated one to comprehend its operating principle. The motor located underneath the cot pulls the bellows down, creating a suction or negative pressure within the lungs. This is the patient's inspiration. Then the bellows are pushed up, causing a positive pressure corresponding to expiration. It is when these bellows are moving upwards that the nurse should insert her arms through the portholes or working ports as it is easier on the patient.

In the event of an emergency the nurse must know what steps to take. Most of the larger hospitals are equipped to generate their own electricity as a safeguard in case of a power failure. However, it is essential to know how to operate the simple manual pump which is attached to the base of the machine and which can be quickly put into use. The hospital electrician should be notified immediately, a doctor too, if necessary, while the nurse remains with the patient.

Underneath also is a little hand wheel which regulates the respiration rate. The latest, most up-to-date models are equipped with special accessories which make nursing care considerably easier and provide the greatest possible comfort for the patient. There is now what is called a "Minnesota sloping front" which places the collar low on the neck, gives more chin space and facilitates the handling of the tracheotomy tube, an aspirator part to remove secretions from the mouth and throat, and a resuscitator attachment which keeps the patient breathing while the cot is open. Little extras include a safety alarm which rings a bell or flashes a light if the respirator stops or is not operating properly. A "nurse caller," that rings a bell at the slightest touch of the cheek, gives the patient extra confidence. An adjustable foot-rest prevents foot-drop and keeps the sheet from touching the extremities.

The J. J. Monaghan Co. has a hospital respirator which is made up of a chest shell (varying sizes can be obtained) and a Positive Pressure unit complete with all its accessories. These have several advantages as they do not require as many nurses for sustained nursing care and the patient can be made more comfortable. The patient's feeling of apprehension is reduced with more complete and unhurried care. Physiotherapy treatment is easier as only the anterior portion of the thorax is covered by the respirator shell.

Nursing Care of a Patient in a Respirator

Respiration: The nurse is responsible for the operation and continuous functioning of the respirator. She must immediately report any untoward signs in either the patient's breathing or color. The patient may have a tracheotomy tube which will need regular cleaning and suctioning. Routine mouth care is also important.

Feeding: Eating may be one of the few remaining pleasures which the patient may have and the attractiveness of his diet cannot be stressed too strongly. Care must be taken that he does not aspirate any food particles. If he is unable to swallow he may be fed by a duodenal tube.

Elimination: Keeping the patient clean and dry is a major problem but absolutely necessary as pressure sores form so easily. He may have an indwelling catheter which must be changed and irrigated regularly. Bowel evacuation is usually dependent on periodic enemas.

Support and exercise: In addition to the support for the feet every effort should be made to keep the legs straight with sandbags or pillows to prevent them from falling outwards. The constant motion of the machine and the weight of the paralyzed limbs quickly cause pressure areas to develop. The elbows can be raised off the cot with soft pads — one under each forearm and one under each upper arm. The heels must be closely

watched too. Back care is of primary importance. While the patient is out of the respirator, with the help of one or two other persons, he may be given alcohol rubs. All precautions must be taken to prevent sores on the back.

Physiotherapy treatment is started as soon as possible. All the paralyzed muscles are exercised passively each day to ease muscle spasm and to prevent the wasting of muscle tissue. The patient feels much more comfortable after these treatments. All these precautions can and do prevent a great deal of permanent damage.

Medication: Sedation usually plays an important role. As this disease affects the central nervous system the degree of irritability that the patient experiences is quite high. Phenobarbital or neurotrisentin may be administered for some time after the onset of the disease. There may be a period when the patient suffers severe muscle spasm and will require more sedation to help him bear the pain. Gentle exercise of the limbs eases this pain as it is primarily due to poor circulation of the blood and inactivity of the muscles.

Opening the respirator: This is perhaps the most difficult part of the nursing care. The patient may be very apprehensive and requires constant reassurance. Before starting the nurse should secure at least one or perhaps two assistants. Everything she will need while the patient is out must be close at hand as she will be working under pressure and every second is precious. It is wise to explain carefully to her assistants the routine she plans to follow. The patient must be watched carefully during this time and oxygen administered if necessary. The machine should be moved gently to avoid unnecessary jarring and care taken that the paralyzed limbs are not injured.

Nursing care of these patients is perhaps more complex than in any other type of bedside nursing. Every skill we have ever learned is useful.

Rehabilitation of the Chronic Poliomyelitis Patient

J. Graham Pincock, M.D.

As we consider the problem of rehabilitation of the polio patient in the chronic phase of the disease, let us take a moment to recapitulate the essential pathology, so that we will have a firm base upon which to build the essential techniques necessary for recovery and further rehabilitation.

It must always be remembered that polio is a disease not of muscles, but of primary neurones, and that the disease is in the spinal cord, not in the muscle bulk. Three things can happen to these cells as a result of the indiscriminate attack of the virus:

1. They may die—in which case no recovery is possible for that particular neurone since there is no power of regeneration.

2. The cell may be temporarily knocked out and prevented from functioning simply because of the disturbance of biochemical processes which appear to be essential for cell metabolism. If this derangement is not too serious, as soon as the acute phase of the disease has subsided functional continuity will return and a rapid recovery ensues.

3. The cell may be chemically disrupted and, although not dead, has become severely damaged so that the nerve fibre has degenerated and the continuity of nerve cell and motor unit has been disrupted. This, too, can ensure recovery, but only by the growth of a new fibre directly from the axone hillock to the degenerated muscle. This

Dr. Pincock is the director of physical medicine at Deer Lodge Hospital, Winnipeg, Man.

takes a considerable period of time proportionate, approximately, to the distance from the innervating cell. Since the rate of growth is considered to be approximately 1 millimeter a day, the reinnervation of the small muscles of the foot, for example, would require a minimum period of 18 months.

We must bear in mind that the nerve cell, nerve fibre, and muscle fibre operate as a unit and that irreparable damage will occur in all if any one becomes disturbed. Consequently in long-delayed recovery, it becomes essential to maintain the continuity of muscle fibre in order that permanent disability will not result when the nerve fibre finally grows to sufficient length but finds nothing to innervate. Our principle of rehabilitation must be the retention of those muscle fibres which have any possibility of expected reinnervation. Coupled with this is the teaching of a technique, through re-education, of new skills in various portions of the body in order to reduce the total disability of those areas that are permanently damaged by the development of replacing movements as a substitute.

Simply and obviously, the return of normal function is the most fundamental improvement and, therefore, the most important consideration in therapy. It must supersede all other considerations. With this background of essential pathology and understanding of the mechanics involved in the disease process, we have a firm base upon which to treat the individual patient.

All rehabilitation techniques must follow basic principles irrespective of the disease to which they are applied. Two major principles are apparent:

1. That the therapy must increase the total functional capacity of the individual.

2. That it will speed up the recovery process, thus avoiding unnecessary convalescence.

Applying these principles to poliomyelitis, it is apparent that little effect can be exerted on the rate of growth of the nerve fibre. Consequently, the speeding up process will be limited strictly to either the re-education techniques or to the substitution of some appliance or other method for an already permanently disabled part. On the other hand, only through the maintenance of adequate muscle bulk and fibre can the necessary recovery be obtained in those groups or units in which the nerve fibre is regenerating.

The first and most important point, then, is a proper assessment of the individual with the disease and an attempt to make a sound prognosis as to which nerve fibres will recover and which will not. This can be an extremely difficult task. It requires skill, experience, and thoroughness and it must be remembered that there are few guideposts. The examining physician must be extremely careful not to disregard muscles which might have a potential for recovery. It has been my practice to assume that any muscle, about which I am doubtful, has a potential for recovery and treat it in that fashion until time and event has either proven or disproven my contention. In this way it is possible to avoid unnecessary crippling of an individual simply through lack of adequate therapy to a given part. It is axiomatic that it is too easy to give up too soon.

So much for the physical aspect of rehabilitation. Let us look now at the other aspects of the patient which, although of secondary importance, are still essential in his total rehabilitation. There is a tendency among medical personnel to develop a concept of their activities as though they are treating disease or illness or disability whereas, in fact, they are doing nothing of the sort at all. Purely and simply, they are *treating people*. True, these people may suffer from disease or disability, but the essential point to remember is that *the individual is of primary importance*.

Everyone accepts that the patient not only has physical but also mental and emotional reactions as a result of the ravages of this disease. The dominant therapy has always been physical and in many cases the other aspects have been totally disregarded. It is just as important to have a well balanced emotionality and a sound intellectual approach to one's problem, as

it is to have the physical capacities to walk.

What steps, then, should we take in dealing with these specific problems? Let us first consider the mental aspects of the disease. People who have observed large numbers of cases are satisfied that encephalitis occurs in a high percentage of persons infected with the polio virus. This may result in a temporary lessening of intellectual capacities during the acute phase of the disorder. This applies no less in the chronic phase. Disuse atrophy is usually applied to the muscles but it can also be applied to the mind. It is too easy for the patient, semi-bedridden or bedridden for long periods of time, to become so inactive in the mental sphere that he slips into an illogical torpor and fails to grasp the intellectual activities that are available or to appreciate his own capacities to their utmost. This can be prevented if the time is utilized to give these patients adequate educational stimulus and provide periods of discussions and mental stimulation even though excessive amounts of physical rest may be required.

Similarly, in the emotional sphere, the patient's most difficult problem is his adjustment to the enforced period of inactivity and his tendency to become overdependent upon the nursing attendants, be they professional or family. In contrary fashion, his resentment and hostility towards his disease and its enforced limitations may be projected directly against his physician, nurse, family and friends. The functional capacity of these patients is severely limited unless they can be helped to develop an adequate adjustment to the limiting factors of their physical illness.

An understanding of the problems of the patient, a discussion of his anxieties and fears, not only concerning his recovery but also of his responsibilities, including family and work, is absolutely necessary to a full understanding of the social connotations and implications which the disease presents to him. Since we accept that we are treating these persons as individuals, they are as much a part and parcel of our problem as is the muscle re-education which we so energetically pursue. With these thoughts in mind, one can visualize a program that will be centred not only around a department of physiotherapy but also will be developed around the ward, the hospital, the home and will include recreation, home visits, intellectual pursuits, and re-training. Our program must be developed to fit the specific individual.

There are no rules that can be laid down since no two individuals present similar problems. There are no specific treatments that can be distributed, in blanket form, to all polio patients. One must return to basic principles and build a program upon those principles for each individual. This requires some thought and some work to which, unfortunately, both the nursing and medical professions have been severely allergic in the past. I appeal to you to approach these people with this kind of understanding so that a proper recovery can be offered to them.

Let us turn to the use of appliances. Appliances are not, as is commonly thought, made up in numbers and fitted to the individual patients at prescribed intervals and simply adjusted to his particular specifications. Each piece of apparatus that is completed must be individually tailored to fit a specific need of the individual. In prescribing an appliance of any description, one must first decide whether this patient is past a particular recovery point and whether this particular function is not going to return because cell death has occurred. If this question is answered in the affirmative, the next question is: "What method of substitution can be used that will produce the maximum functional result?" Then, either a surgical approach of tendon transplant or some appliance, such as a walking caliper, a drop-foot splint or abdominal corset, is individually designed to suit a specific need of that individual patient — built, applied, and the patient re-educated in its use. I would serve a note of warning on the too early use of these types of appliances. Again, it is too easy to accept defeat too soon and the appliance, merely serving as a

substitute, prevents recovery which might otherwise have ensued. However, properly applied, these appliances can make a tremendous difference to the functional capacity of the individual.

We have covered a tremendously wide field in a general way. I have avoided dealing in specific problems simply because specific problems belong to specific patients. Illustrative cases could be quoted but as long as the fundamental principles remain basic in the concept of all people connected with therapy, then we can expect to get the maximum amount of recovery from the incapacitated individual. I am convinced that it is fundamentally these principles which need to be accepted rather than anything in the way of a real new approach to some specific part of therapy. It is only when therapy fails to recognize these principles that it becomes a drudgery or a failure and we have to settle for a second-best.

Gamma Globulin

W. STUART STANBURY, M.B.E., B.A., M.D.

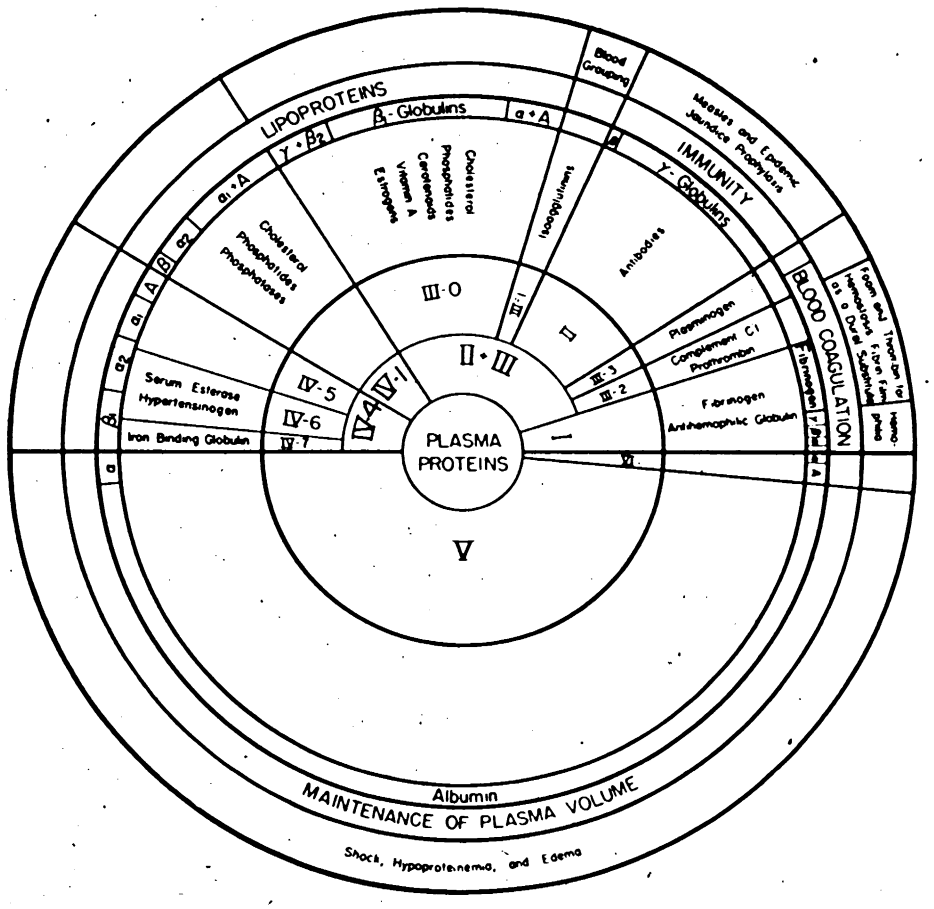
A FEW MONTHS AGO, the Honorable Paul Martin, Minister of National Health and Welfare, requested the Canadian Red Cross Society to participate with federal and provincial Departments of Health and the Connaught Medical Research Laboratories, University of Toronto, in a project for the production of gamma globulin, the protein fraction of human blood which is still our most effective means of preventing or minimizing the paralytic effects of anterior poliomyelitis. This will necessitate the collection each year of vast quantities of blood from the Canadian public, a task which will not only strain the resources of our Society but will require the assistance of every public-spirited citizen if the program is to be a success. I can think of no more influential group in Canada than its professional nurses, not only in allaying the fears of timorous prospective blood donors but in disseminating authoritative information on the use and, even more important, on the limitations of gamma globulin as a prophylactic agent during epidemics of poliomyelitis. An informed public is the *sine qua non* of any successful public health program.

The production of gamma globulin, however, is but a facet of the new program, important as it may be. The completion of the new processing plant, now under construction at the Connaught Medical Research Laboratories, Dufferin Division, 12 miles north of Toronto, will make available for the first time in Canada substantial supplies of the other clinically useful plasma protein fractions as well. I am glad to have an opportunity of telling you something of this program and sharing with you the new horizons in medical treatment and research it may bring to us as Canadians.

Today a transfusion of whole blood is a relatively common procedure in the majority of Canadian hospitals. Yet this therapy is of comparatively recent origin and has shown phenomenal development during the past 15 years. It was not until the discovery of the blood groups by Landsteiner in 1900-01 that the transfusion of human blood directly from one person to another became feasible. The introduction, in 1914, by Hustin and Lewisohn of sodium citrate as an effective anticoagulant paved the way for the first transfusions with citrated blood by the late Dr. O. H. Robertson, one time surgeon in the Hospital for Sick Children in Toronto, when serving with the British Army in France during World War I.

The techniques developed by Robert-

Dr. Stanbury is National Commissioner, The Canadian Red Cross Society, Toronto.



PLASMA PROTEINS —*Their natural functions, clinical uses and separation into fractions.*

son remained relatively unchanged until the time of the Spanish Civil War, when another Canadian, the late Dr. Norman Bethune of Montreal, first demonstrated in a practical manner the use of stored blood. Blood collected from civilians behind the lines was rushed forward in refrigerated vans. Later, throughout World War II, similar blood stores saved thousands of lives on the battlefields and among the civilian population in Great Britain, harried by air raids.

The discovery of the Rh factor by Landsteiner and Wiener in 1940 ushered in a rapid succession of newly recognized blood antigens so that at the present time with the known multitudinous combinations of blood factors we seem to be approaching a situation forecast by Landsteiner that man's blood may well prove to be as individual as his fingerprints! Fortunately for the clinical pathologist, all these blood factors do not appear to have clinical significance, although several of them besides the Rh factor are capable of sensitizing a patient through transfusion or pregnancy and not infrequently pose a major problem in the selection of a compatible blood for a patient so sensitized.

Although whole blood transfusion still remains the method of choice in meeting a deficiency of red blood cells or in replacing blood volume, the use of specific constituents of human blood has gradually increased since the early years of World War II.

The red cells in whole blood are perishable and, therefore, any given bottle of blood cannot be preserved at refrigerator temperature in a usable state for more than three weeks. The

supernatant plasma, the liquid portion of the blood, can be syphoned off and will keep more or less indefinitely in a frozen or dried state. During World War II, when large quantities of dried plasma were shipped overseas for the armed forces, it was also necessary to transport a bottle of sterile distilled water with each unit in order to reconstitute the plasma ready for use in the treatment of wound shock.

In the syndrome known as shock there is a loss of fluid from the circulation, leading to a reduction in total blood volume which, unless restored and maintained, may become progressive and lead to death. In fact, shock is the commonest cause of death whether on the battlefield or in the operating and delivery rooms of our civilian hospitals. Plasma is effective in the treatment of shock by holding fluid within the blood stream and 80 per cent of this osmotic effect is due to one of its protein components — albumin.

By 1941, methods had been devised to separate albumin from plasma and to package it in a stable solution. Albumin is normally put up in 25 per cent solution, which is approximately five times its concentration in normal plasma. A 100-cc. vial of albumin has an equivalent effect to a pint-size bottle of dried plasma yet occupies only one-ninth the shipping space with a corresponding reduction in weight. Moreover, plasma albumin does not freeze at ordinary temperature and is, therefore, suitable for use under arctic conditions. Most important of all, perhaps, unlike pooled dried plasma, it does not harbor the virus of homologous serum jaundice, a severe and not infrequently fatal disease, which can be transmitted by transfusion.

Fractionation of Plasma

In order to prepare albumin and the other protein fractions of plasma, the plasma from 2,000-2,500 blood donors is placed in a 125 gallon stainless steel tank. Alcohol and various buffer solutions are added, the whole procedure being carried out at a temperature of -5° C. (23° F.). Fraction I, or the fibrinogen fraction containing the factor useful in promoting the clotting of blood, is precipitated and is separated out in a large, rapidly-spinning centrifuge. The residual fluid is syphoned off into a second large tank where additional alcohol and buffer is added, thus precipitating Fraction II which contains gamma globulin. By repeating the process of precipitation, centrifugation and separation, all at the low temperature of 23° F., other fractions are isolated. With the standard methods now in use Fraction V contains the albumin.

In each case, the solid matter separated by the centrifuge is removed in the form of a paste and placed on large trays within a cabinet which can be tightly sealed and evacuated. Under these conditions, the protein fraction loses all its moisture, including the residual alcohol, and is rendered into a dry powder. The powder can then be dissolved, purified and finally put back into solution ready for use.

Clinical Uses of Plasma Protein Fractions

While today we are primarily interested in the gamma globulin fraction of human blood plasma, it may be of interest to comment briefly on the other fractions which have a recognized therapeutic application at the present time, although clinical and laboratory research is rapidly extending this field.

We have already noted the value of plasma albumin and its superiority over pooled dried plasma in the treatment of clinical shock. This will probably continue as its main therapeutic role. Nevertheless, it is of proven value for the edematous patient with a low serum albumin, in his preparation for surgery or during his post-operative period. Although agreement is by no means unanimous, it may have a place in the treatment of certain types of nephrosis and in cirrhosis of the liver.

Fibrinogen (Fraction I) has been used as replacement therapy where a congenital or acquired absence of this substance in the blood of a patient has been encountered. The acquired form of this deficiency may be found where there has been extensive hemorrhage, particularly associated with liver disease or pregnancy. In several such obstetrical emergencies large doses of fibrinogen have been truly lifesaving.

Antihemophilic globulin, associated with Fraction I, has been successfully used in coping with intractable bleeding in hemophilics. Unfortunately the fraction is very unstable and to be effective must be prepared from very fresh blood.

Thrombin has been used as a local hemostatic agent and various absorbable sponges (e.g., fibrin foam) have been developed. Fibrin Film, a combination of thrombin and fibrinogen, will almost certainly replace plastic films, particularly in neurosurgery.

Gamma globulin, in which almost all the antibodies against infection are concentrated, has been, perhaps, the most extensively used of all the plasma fractions. Its demonstrable success in the prevention or modification of measles among exposed susceptible children has led to its use in treatment of early mumps in adults in an endeavor to reduce complications. Convalescent German measles gamma globulin has also been used to protect women in early pregnancy in order to reduce potential congenital fetal abnormalities. More recently gamma globulin, in even very small doses, has proven effective in protecting contacts during epidemics of infectious hepatitis.

All of the above mentioned diseases are due to the extremely minute organisms — the viruses. The fact that both in the United States and Canada blood used for the production of gamma globulin is collected from all parts of the country by our two national Red Cross societies, and is processed in very large pools, seems to ensure the optimum chance that the final product will contain antibodies against a wide variety of diseases. For these reasons, some two years ago, an attempt was made to evaluate the use of gamma globulin in the control of another viral disease, anterior poliomyelitis.

In order to appreciate this new role of gamma globulin one must know something of the etiology, pathology, and epidemiology of this disease. Research studies financed by the U.S. National Foundation for Infantile Paralysis have revealed the fact that there are three different types of polio virus found throughout the world — Type I or the Brunhilde strain, Type II or the Lansing strain, and Type III or the Leon strain. Each strain is capable of causing paralytic poliomyelitis and immunity developed to one strain is not protective against the other two. There is also considerable variability in virulence of viruses encountered within each strain. In highly populous areas, particularly in primitive communities, all three strains may be present simultaneously, either as clinical disease or in the carrier state. This could explain the apparent predilection of the disease for the most hygienic communities and the occurrence of epidemics in rural and semi-rural areas rather than in the larger centres of population.

The isolation of the virus from municipal sewage during the peak of a polio epidemic has led to the belief that intestinal carriers may be responsible for the recurrence of the disease. There is, however, an increasing amount of evidence that the disease may more often be spread by the respiratory method.

The paralytic manifestations of polio are due to the localization of the virus in the anterior horn nerve cells of the spinal cord, causing inflammation and finally destruction of these cells. Once the cell in the grey matter of the spinal cord is destroyed it does not regenerate and the muscle once served by that cell through its motor nerve fibre becomes paralyzed.

Several years ago it was demonstrated that for some time prior to localization in the nerve tissue of the spinal cord, the virus circulated in the blood stream. This led to the speculation of whether it might be possible to destroy the virus while still in the circulation and before it became localized in the spinal cord. Preliminary work on experimentally infected animals was encouraging and demonstrated that injections of gamma globulin, if given in time, could modify the action of the polio virus, so that although the disease was not prevented, the usual paralysis frequently was.

To test this theory, during the summers of 1951 and 1952 approximately 55,000 American children residing in epidemic areas were injected, half with gamma globulin and half with a harmless solution of gelatin. Every effort was made to control these experiments, the research teams carrying out the inoculations and subsequent clinical examinations being unaware of the product used for the case under investigation. Out of a final total of 104 cases of paralytic poliomyelitis developing in this group over a period of 13 weeks, 73 occurred in the group receiving gelatin only and 31 in the group injected with gamma globulin.

During the first week after injection, the protection against paralytic disease was not significant, 12 of the 28 cases occurring in the group treated with gamma globulin. Nevertheless the severity of the disease was modified.

Between the second and fifth weeks after injection only seven of the children receiving gamma globulin were stricken as opposed to 39 in the untreated group, which is a highly significant difference. From the studies, it would appear that, for most persons, the protection given by gamma globulin lasts only approximately five weeks.

Gamma globulin is given intramuscularly, never intravenously. The usual dosage is 0.14 cc. per pound of body weight. Doubling the dosage does not materially extend the period of protection. If a longer period of protection is needed it would be more saving to repeat the same dose after about five weeks, thereby extending it to 10 or 13 weeks. It cannot be too strongly emphasized, however, that this is not only expensive but that scarce material must not be wasted. It is not a treatment for poliomyelitis and even very large doses will not affect the course of the disease one symptoms have appeared, even in the preparalytic phase.

Gamma globulin is certainly not a panacea for the prevention of paralytic poliomyelitis, yet at the present time it is the only preventive agent we have available. It represents the most significant step forward in many years in the control of this disease.

Recent unfavorable reports from the United States on the use of gamma globulin in the control of paralytic poliomyelitis must be examined in relation to the established facts. It should be remembered that gamma globulin injected into experimental animals has the power of protecting them against doses of active polio virus even when the virus is introduced into the brain. This holds true when the gamma globulin is given before or at the same time as the infecting dose. If it were similarly possible to determine the exact time the human contact is infected, there is every reason to believe he would likewise be protected by gamma globulin containing specific antibodies against the infectious virus. The American reports simply underline the practical difficulties in anticipating a polio epidemic and, because of this, the limitations of gamma globulin as an agent in the control of the disease.

Certainly a vaccine, effective against all three known strains of the virus, would confer more lasting immunity. Promising results have been obtained on an experimental basis and extensive research is in progress both in the United States and at the Connaught Medical Research Laboratories, University of Toronto. Nevertheless, in the interim, and probably for at least the next three years, gamma globulin remains the one and only weapon. Because of the limited supply available every precaution must be taken to see that it is used as effectively as possible. For this reason distribution of gamma globulin is vested in a National Medical Advisory Committee set up by the Dominion Council of Health and is effected through the provincial Departments of Health.

In any consideration of the use of gamma globulin during polio epidemics its limitations as an immunizing agent and its effectiveness under such conditions must be borne in mind. There is no doubt that poliomyelitis in Canada has been on the increase during the past 10 years. For 1950, 911 cases were reported; for 1951, 2,563 cases; for 1952, 4,695 cases, with an all-time high for 1953 of 8,737 cases,

There has, at the same time, been an increasing shift of incidence from childhood to adolescence, early adult and even middle life in most civilized countries, with an increasing frequency of the cerebral and bulbar forms of the disease. Nevertheless, it must be recognized that the paralytic forms of the disease have a relatively low incidence as compared with other much more common crippling diseases of childhood.

Poliomyelitis has been so dramatized that when the risk approaches one in 1,000 it carries the emotional impact formerly associated with smallpox and bubonic plague. This is not always appreciated even in professional circles and nursing directors have frequently complained of the difficulties of recruiting graduate nurses in the time of polio epidemics. Dr. Beverley Hannah, medical superintendent of the Toronto Isolation Hospital, has publicly stated that in his 30 years of experience at the Isolation Hospital and the Hospital for Sick Children he has never encountered a case of infection of a nurse or attendant caring for polio patients.

Although it is quite true that the prevention of crippling and death cannot be calculated in dollars and cents, it is doubtful whether expenditures such as would be required for a completely adequate gamma globulin program would be contemplated for the control of any other disease with a similar low morbidity rate. In one of the American field experiments the gamma globulin used at $2.00 per cc. (wholesale commercial rates) cost $224,000 or $28,000 for each of the eight cases in which paralysis was presumably prevented! If it were feasible to protect Canada's three and one-half million children below the age of 15 years, even for the limited period of five weeks, the cost of producing the necessary gamma globulin, and that from the blood of voluntary donors, would probably exceed $13,000,000!

Nor is it practical to produce the volume of blood each year which would be required for such mass inoculation. Approximately 1 gram (5 cc.) of gamma globulin can be prepared from one pint of blood. For a group of 27,000 children in the American trials approximately 30,000 grams of gamma globulin were used, representing the donations from some 30,000 blood donors. To give Canada's children even a single protective dose would require 3,900,000 donations of blood annually over and above that now used in hospitals for transfusion therapy. To make such passive protection reasonably adequate might require several injections, repeated at five-weekly intervals, during an epidemic. Moreover such a vast quantity of blood is far beyond the processing facilities in Canada, which is unlikely to exceed 150,000-160,000 bottles during any one year.

There are many other practical difficulties such as our inability to determine the time of exposure to the disease and hence the optimal time to use gamma globulin as well as the impossibility of distinguishing between the susceptible child and the one who has already acquired a natural immunity.

In spite of all these problems and difficulties gamma globulin will continue to be used, not because it is the perfect method of controlling paralytic poliomyelitis but because it is the only preventive agent available even in limited quantities. It is, therefore, most necessary to control its use and to apply it in those areas where it is most likely to render maximum benefit. It is precisely for this reason that the Department of National Health and Welfare has set up a committee of expert epidemiologists and clinicians. In one severe epidemic it may be most practical to inoculate all children in a given age group in which 50-60 per cent of the cases are found. In another it may be much more efficacious to limit its use to families where cases have been diagnosed.

If the professional nurse is to render the maximum service in her community she must not only appreciate the value of gamma globulin in an epidemic but fully understand its manifest limitations. With blood collections maintained at their present tempo and with the available proces-

sing facilities, approximately 100,000 5 cc.-vials should be available before the next polio season, four times as many as were on hand during the summer and fall of 1953. It is obviously vitally important that the present rate of blood collection should not only be maintained but greatly accelerated. In this, you, as professional nurses, can play a major role.

Why, you may ask, is the Canadian Red Cross Society involved in the gamma globulin project? From what has been said, that the production of gamma globulin is directly dependent on the collection of adequate quantities of whole blood, it resolves itself into a blood problem rather than a polio problem — and the collection of blood for the use of hospitals, the public health service, the armed forces, and the civilian population in time of disaster is the *raison d'être* for the C.R.C. Blood Transfusion Service.

Blood is a peculiar commodity. It cannot be manufactured in a test tube, it can only be obtained from a human being who must willingly and voluntarily give his consent before it can be removed. It becomes more than merely commercial production, involving community understanding and cooperation. The project is of such magnitude that it requires cooperation, on a national scale, irrespective of city and provincial boundaries. It needs, for its success, the support and sympathy of such professional groups as doctors, nurses, and hospital administrators, who are best able to appreciate the significance of an adequate blood fractionation program.

The Canadian Red Cross Society has almost 15 years' experience in the recruitment of volunteer blood donors, and in the collection, storage, transport, and processing of blood. It was, therefore, logical that the Minister of National Health should request the Society to undertake this project. With its 1,300 branches from coast to coast it should be possible for almost every able-bodied adult citizen to participate as well as ensuring, with a nation-wide coverage, the optimum chance that Canadian gamma globulin will contain protective antibodies against the three known strains of the polio virus.

The professional nurse, whether serving in public health, industry, the hospital, or in the home, has as unusual opportunity to influence public opinion, particularly in matters relating to health. The Canadian Nurses' Association, through its membership, can do much to make this new project an outstanding success in the annals of Canadian public health endeavor.

Immunization in Poliomyelitis

R. D. DEFRIES, M.D., D.P.H.

THERE IS A GENERAL appreciation by health authorities that the present methods used in the attempt to control the spread of poliomyelitis are inadequate. It is recalled that, in spite of the great value of diphtheria antitoxin in prevention and treatment, it was not possible to control diphtheria until diphtheria toxoid was introduced by Ramon in 1923 and *active* immunization against diphtheria became a routine procedure. The situation in poliomyelitis is similar to that relating to diphtheria before the development of diphtheria toxoid. Today, gamma globulin is available. It is a preparation of human blood serum containing specific antibodies for the three recognized types of poliomyelitis viruses.

The National Foundation for Infantile Paralysis Inc., New York, conducts, in the United States, a very extensive program of treatment for active cases of poliomyelitis and aftercare. Research in poliomyelitis has also occupied a major place in the work of this Foundation. Through

Dr. Defries is director, School of Hygiene and Connaught Medical Research Laboratories, University of Toronto.

well organized teamwork, the occurrence of the three main types was demonstrated. Further, it was shown that monkeys could be protected against these three types by the use of serum from monkeys that had been inoculated with these viruses. Gamma globulin, obtained from the blood of adult humans, contained the essential antibodies. The next step was a large scale trial to determine whether gamma globulin, if used sufficiently early and in adequate amounts, would prevent the development of new cases in a community where the occurrence of poliomyelitis had just been reported. In 1951-52 Dr. W. McD. Hammon, of the University of Pittsburgh, directed a study of 55,000 children, with suitable controls. His findings gave evidence that gamma globulin was of value and these findings are generally accepted.

The extensive use of this serum last year in the United States has, unfortunately, not given a decisive answer regarding the value of gamma globulin. It would appear that in large-scale trials the serum was used too late in the course of the outbreak. The committee which reviewed the evidence is of the opinion that the serum was not of value in family contacts, since its administration was too late to be of possible value.

In Canada, through the cooperation of the Department of National Health and Welfare, the provincial Departments of Health, the Canadian Red Cross Society, and the Connaught Medical Research Laboratories a limited supply of gamma globulin was made available for observation last summer. This year the amount will be much larger. The committee in charge of distribution has, in addition to other recommendations, suggested the use of the serum for the protection of pregnant women in communities where poliomyelitis is epidemic. The occurrence last year of a number of paralytic cases, requiring treatment in a respirator, among pregnant women in the city of Winnipeg indicated the need for this provision. For these it would be possible to maintain a passive immunity and thus afford protection. The use of the serum for hospital personnel during an outbreak of poliomyelitis in a community might also be considered.

As in the case of diphtheria, the use of serum will not provide an answer to the problem of the control of poliomyelitis. The need is for the development of a preventive vaccine. Here again the National Foundation has directed an intensive program of research. Dr. Jonas E. Salk, of the University of Pittsburgh, has made extensive observations, in monkeys, of a vaccine containing the three types of poliomyelitis viruses. He has demonstrated that protection is afforded by the vaccine when injected by various routes in the test monkeys. Over a year ago Dr. Salk immunized a group of children. Study of the blood serum of these children has shown (a) that a measurable quantity of antibody was present after a period of 12 months and (b) that a "booster" dose of vaccine elicited a marked increase in antibodies, indicating that the immunological response was similar to that occasioned by a "booster" dose of diphtheria toxoid in the case of children who had received toxoid injections a year previously. This finding is most encouraging.

During the early months of 1954 Dr. Salk administered the vaccine to approximately 8,000 children; 3,000 were given the vaccine prepared by Dr. Salk and 5,000 the vaccine prepared, under his direction, by one of the pharmaceutical companies. The plans of the National Foundation provide for a widespread trial involving the immunization of several hundred thousand children. It is possible that the number receiving the vaccine will be smaller than expected, owing to the difficulty of preparing it in quantity in time for use this spring. Each lot of vaccine requires testing in monkeys, in tissue culture, and in rabbits. These triple tests are repeated in the National Institutes of Health, Washington, and in Dr. Salk's laboratories. As a result of the exacting specifications of the vaccine, the quantity available will probably be less than was anticipated.

During the past six years, Doctor

A. J. Rhodes, who is now director of the Research Institute in the Hospital for Sick Children, Toronto, conducted research in the Connaught Medical Research Laboratories on various aspects of poliomyelitis, with support from the National Foundation. Following the demonstration of the growth of poliomyelitis virus in tissue culture by Dr. John F. Enders, of Boston, in 1949, progress was made in a number of centres, including Toronto. Dr. Rhodes and his colleagues obtained improved results by substituting for the nutrient fluid used by Dr. Enders[1] a medium developed by Morgan, Morton and Parker[2] in the Connaught Medical Research Laboratories. Subsequently a technique was developed by the Connaught group[3] for the cultivation of poliomyelitis viruses in quantity. It is of interest that a large proportion of the fluid cultures of the three strains of poliomyelitis viruses used in the completion of the trial vaccine in the United States was prepared in the Connaught Medical Research Laboratories. Thus the generous support given by the National Foundation for research in poliomyelitis has made possible a substantial contribution to the experimental trial of a poliomyelitis vaccine.

Canada will follow with great interest the initial use of the vaccine. An evaluation of it cannot be made until all data are collected and studied. It will, therefore, be next year before it will be possible to express an opinion on the value of the trial vaccine. The present vaccine contains the three types of viruses, inactivated by formalin. The use of attenuated living strains is being investigated by Dr. A. B. Sabin and others and attempts are also being made to propagate the viruses in embryonated hens' eggs. It is evident, therefore, that substantial progress is being made towards the development of a successful preventive vaccine for poliomyelitis.

REFERENCES

1. Enders, J. F., Weller, T. H., and Robbins, F. C. *Science,* 1949, 109:85.
2. Morgan, J. F., Morton, W. J., and Parker, R. C. *Proc. Soc. Exp. Biol. and Med.,* 1950, 73:1.
3. Farrell, L. N., Wood, W., Franklin, A. E., Shimada, F. T., Macmorine, H. G., and Rhodes, A. J. *Can. J. Pub. Health,* 1953, 44:273.

Heart Attacks

Lack of exercise and overeating, not hard work, are the major causes of heart attacks among business executives. Consequently, they work with mental brakes set against their work and in mortal terror of a heart attack. They are afraid to really live for fear of dying.

It is becoming increasingly evident that the real culprit is the push-button civilization which our businessmen have created. With the bountiful blessing of labor-saving devices, our ex-college athletes sit in their offices all day, doing little that is more strenuous than answering the telephone or walking to the washroom.

His thrice-daily escape is found in eating fine groceries. While he grows fatter his heart, muscles, and glands degenerate and stagnate as he drives home in a car with power-steering. If this is the millennium, then all the basic principles of biology and human physiology are a fraud.

Four times as many men have heart attacks as women. Current widely-held medical opinion attributes this to differences in the anatomical structure of the arteries of the sexes. Women outlive men throughout the animal kingdom even where "most of the work is done by the so-called weaker sex and the male is the idle drone."

— THEODORE G. KLUMPP, M.D.

Since the war, Canada has made a deliberate and successful attempt to secure immigrants of young working age for manufacturing industry. There was general satisfaction with this policy but some concern that Canada may be robbing European countries of their most valuable citizens.

Institutional Nursing

Fear Factors in Poliomyelitis

F. LILLIAN CAMPION, M.A.

ONE of the most difficult nursing problems relating to poliomyelitis is fear. The emotional impact of any illness is an important consideration for the nurse but this is especially true with poliomyelitis.

Among the many reasons for this are:

> The unpredictable and frequently epidemic nature of the disease; the lack of specific knowledge regarding its spread and immunology; the emphasis placed on the crippling effect of the disease when appeals are made for funds; the need for isolation and quarantine.

The publicity given to the number of people affected, the lack of personnel and equipment, and other problems have given the disease an importance which the actual facts do not always warrant.

There are some very real fears shared by the patient and his family:

> Fear of crippling and deformity; fear of separation, especially when the patient is a child; fear of the unknown experiences facing him in the hospital; fear of the respirator; fear of pain, of death. There are fears relating to the well-being of the family; of others contracting the disease; of financial security and loss of employment.

These fears spread throughout the entire community. During an epidemic they may reach proportions of panic and hysteria.

Many nurses are afraid to care for patients with polio. Frequently it is because they, too, are uninformed and unprepared. Fear of carrying the infection to their own families, of using unfamiliar equipment, of the life-saving emergencies that may arise, and that they will be inadequate to meet the nursing needs of the polio patient.

Therefore, it is vital that all nurses be well informed regarding all aspects of poliomyelitis and the nursing care required. They can be calm, efficient, and reassuring only when they themselves are confident and secure. They need to know the many reassuring facts about polio in order to do their part in allaying fears.

It is true that there is a greater incidence of polio on this continent than there was 10, 15, 25 years ago. It is true that adults are being affected to a greater extent than heretofore. It is true that the number requiring respirator care is increasing. But the future is brightening. Medical knowledge of the disease has increased. Constant research is continuing. The recent advances made in immunology give hope that before too long there will be a vaccine available for active immunization. Of the many who become infected, relatively few suffer serious illness. A great many who do become grievously ill make a good recovery. It is estimated that 50 per cent of diagnosed cases recover completely, 30 per cent are left with a slight handicap that does not impair their usefulness, 12 per cent have more serious after-effects which require the use of appliances such as braces and splints, while 8 per cent die. There were ten times as many deaths in 1952 from motor accidents as from polio.

The nurse should have an awareness and understanding of the many fears of the patient and his family and the emotional reactions which result. Each person will react differently to these fears according to his past experiences. The nurse should be able to interpret the patient's behavior in terms of fears which may be hidden or unexpressed. A calm, friendly, accepting attitude toward the patient will aid in establishing good relationship and will encour-

---

Miss Campion is secretary of nursing service, Canadian Nurses' Association.

age him to discuss his fears so that he may be helped to face them.

There are many ways in which the nurse can help to allay these fears and anxieties. Confidence in the nursing staff can be established from the beginning if the patient and his family are accorded courteous, considerate, and sympathetic attention during his admission. The nurse must know and understand what the doctor is teaching in order that she may reinforce this during her many contacts with the patient. The family should be kept well informed. Let them know when they may visit, what to bring in to the patient and in what other ways they may help. Whenever feasible they should be given an opportunity to help with the care so that they feel they are contributing to the recovery. Set aside a definite telephone hour each day with some member of the staff who knows the patients and is prepared to give the family some personal information about the patient. This is very comforting and reassuring to both the patient and his family, especially if they are unable to visit. The nurse should be available during visiting hours to talk with the visitors, too. Group conferences following visiting hours for teaching and discussion will give mutual support and encouragement.

The unexpected sight of the patient in a respirator, or with a tracheotomy or other such emergency treatment, can be a very frightening experience and a severe shock for the family. When any such emergency has arisen the family should be very well prepared by a careful explanation from the doctor or nurse before going in to see the patient. This will avoid unnecessary shock or panic which may have a very adverse effect on the patient.

The patient, in so far as his condition and age permits, should receive an adequate explanation of the purpose and method of any treatment before it is started. He will cooperate much more quickly if he has some inkling beforehand of what is happening to or expected of him. He should be encouraged and reassured but oversolicitousness on the part of either the family or nurse should be avoided. Overdependency on the nurse or attendants should be prevented by encouraging him to do as much for himself as the doctor will permit.

The hospital nursing personnel needs to work in close cooperation with the public health and visiting nurses who can help to interpret the patient, his family and their problems to the hospital nursing staff. The nurses visiting in the homes have an important part to play in allaying fears. Through their teaching they help to prepare the family for the homecoming of the patient.

A Waiver

A Waiver in Newfoundland
under
THE NEWFOUNDLAND REGISTERED NURSES ACT, 1953

Notice is hereby given that under the Newfoundland Registered Nurses Act, 1953, a Waiver is included, which will allow for registration without examination of the following:

"All nurses who have graduated from recognized Schools of Nursing in Newfoundland and, prior to the coming into force of this Act, who have not previously been registered in this province, but this Waiver of previous registration shall cease to have effect **two years** after the coming into force of this Act."

For information as to eligibility and for application forms, write to: the *Executive Secretary, Temple Bldg., 203 Water St., St. John's,* stating name and location of School of Nursing and year of graduation.

Aux Infirmières Canadiennes-Françaises

De la Poliomyélite à . . .

GUSTAVE GINGRAS, M.D.

IL PEUT SEMBLER ETRANGE de présenter un travail sur la poliomyélite alors que chaque jour s'estompe de plus en plus une formule de prévention. Malheureusement, la formule n'est pas encore tout à fait au point; il faudra peut-être quelques années d'expériences pour en contrôler l'efficacité. La poliomyélite a fait suffisamment de victimes au Canada depuis deux ans. Elle en fera suffisamment cette année et l'année qui vient pour nous tenir en haleine au cours de la prochaine décade. Même si la formule est magique, il se présentera encore un grand nombre de myélites infectieuses et traumatiques où il faudra appliquer, sinon les méthodes identiques, au moins des modifications de ces méthodes qui demandent une connaissance approfondie des principes de base. Que faire des cas isolés qui ne répondront ni à l'immunisation ni au traitement de la phase aiguë?

L'Institut de Réhabilitation a sur ses listes plus d'une centaine d'enfants et d'adultes ayant souffert de poliomyélite au cours des deux dernières années. La grande majorité de ces patients présentent des séquelles permanentes. Trente pour cent utilisent des appareils de prothèses, 5 pour cent sont confinés dans des chaises roulantes. Plusieurs sont de jeunes mères de famille devenues enceintes après le licenciement de l'hôpital. Tous et chacun de ces patients doivent être revus en moyenne tous les quatre mois pour examen musculaire et surtout afin de s'assurer qu'ils ne présentent pas de difformités structurales progressives. Chez l'enfant, les appareils de prothèses doivent être vérifiés et souvent modifiés. Cet aspect du traitement est primordial chez 15 enfants que nous suivons d'une façon tout à fait particulière. Tous sont de grands infirmes porteurs de prothèses. Ils habitent la campagne ou des villages et fréquentent l'école ordinaire.

Au début et à la suite d'une examen de contrôle, on recommandait aux parents de se présenter avec l'enfant à date fixée. Cependant, il semble qu'un tel arrangement n'a pas l'efficacité d'une convocation écrite.

Le traitement et la réhabilitation des sujets atteints de poliomyélite doit être coordonné non seulement médicalement mais encore une surveillance étroite de l'aspect social doit être exercée. Il n'est pas rare qu'un malade passe toute la phase aiguë de la maladie en chambre privée et que s'épuisent ainsi les ressources familiales. Soit par ignorance des facilités existantes, soit par amour propre, il ne réapparait pas à la clinique et ce n'est que plus tard et souvent alors que se sont installées des difformités importantes qu'il est réexaminé.

La recherche de la guérison merveilleuse est aussi à l'origine de bien des difformités permanentes. Une certaine catégorie de malades à la recherche du "miracle médical" qui ne saurait leur être prodigué, se promènent de cliniques en cliniques, d'hôpitaux en hôpitaux et de spécialistes en spécialistes. On a vu un client présentant pied tombant parétique dont le pronostic à la ré-éducation musculaire était excellent, cesser ses traitements pour porter une prothèse sans que cet appareil ait été prescrit. La prothèse étant une source de gêne, des transplantations tendineuses peuvent être effectuées avec succès; le client quitte l'hôpital avant

Le Docteur Gingras est directeur médical, Société de Réhabilitation des Infirmes; assistant professeur, Faculté de Médecine, Université de Montréal; directeur, Service de Médecine Physique, Hôpital des Anciens Combattants, Montréal.

qu'on puisse lui conseiller des exercices de substitution. Lorsque revu quelques années plus tard, la musculature est atrophiée, le pied est lamentablement difformé, le malade se plaint de douleurs au genou et au niveau de l'articulation cocco-fémorale. Un examen plus poussé révèle une scoliose. Inutile de dire que les efforts de l'inévitable chiropraticien entre l'une ou l'autre des phases médicales ou chirurgicales du traitement ne sont pas de nature à égayer la situation.

Notons bien que le premier médecin qui avait recommandé la ré-éducation musculaire était parfaitement dans son droit et qu'il ne s'agit pas ici de critiquer sa décision. Il n'avait peut-être pas suffisamment insisté auprès du malade ou de sa famille sur la nécessité de s'armer de patience. Par ailleurs, la patient a peut-être été mal conseillé et de guerre lasse a abandonné le traitement. Le chirurgien qui a conseillé et pratiqué la transplantation tendineuse a procédé selon une technique éprouvée et reconnue. Malheureusement, le client a "oublié" de se présenter à la clinique externe après son licenciement de l'hôpital. Quelques années plus tard, il se verra condamné à porter un corset, à subir des greffes spinales et des arthrodèses à répétition. Sans doute, il y a faute du malade et de sa famille; cependant, les médecins et les institutions portent aussi leur part de responsabilité. La coordination des traitements de l'éducation et de la réhabilitation totale a été menée avec succès dans certaines institutions hospitalières de notre province mais cet effort n'a donné des résultats de grande qualité que dans un nombre relativement minime de malades. Encore, il a fallu presque toujours dépenser plus d'efforts individuels et collectifs qu'il en aurait fallu normalement pour réhabiliter un très grand nombre de handicapés.

Il n'en demeure pas moins vrai que c'est le résultat de ces efforts individuels et collectifs de même que le travail inlassable des oeuvres de bienfaisance qui a finalement ouvert les yeux des autorités. D'un jour à l'autre on espère voir s'annoncer un plan provincial de réhabilitation des infirmes sous la direction d'un coordinateur. La province offre, peut-être plus que toute autre, des moyens de prévention, de traitement, de convalescence, d'éducation et de placement au travail, mais qui doivent être utilisés conjointement, avec un maximum de récupération du capital humain et un minimum de dépenses. On est peut-être à la veille de prévenir la poliomyélite mais l'expérience de 30 ans de travail ardu, de recherches médicales et sociales ne sera pas perdue, puisqu'elle sera la base d'une nouvelle organisation qui lui devra l'existence.

Il sera peut-être nécessaire et même recommandable de payer aux handicapés non réhabilitables une pension mensuelle. Trouver les candidats ne sera pas difficile, puisqu'ils se présentent déjà en très grand nombre sans même qu'un système de pension ait été établi. La difficulté sera de définir l'incapacité totale alors que celui qui en est victime profite des avantages de la réhabilitation. Les commissions des accidents de travail accordent 100 pour cent d'incapacité aux aveugles. Par ailleurs, combien d'aveugles gagnent avantageusement leur subsistance et sont tout à fait indépendants. Des poliomyélites confinés à leurs chaises roulantes occupent des situations enviables dans le domaine du droit, de la politique ou de l'administration. Leur revenu est de beaucoup supérieur à celui de nombreux individus normaux. Devant une telle situation, on pourrait facilement transposer un vieil adage: "Il n'y a pas d'infirmités, il n'y a que des infirmes."

Ce n'est qu'en coordonnant les efforts et en établissant des centres spécialisés que l'on pourra procéder à l'évaluation totale des handicapés. Cette évaluation qui permettra d'établir un pronostic de réhabilitation ne sera pas seulement physique mais devra inclure les éléments psychologiques, psychiques, sociaux, moraux et financiers qui s'imposent lorsqu'on envisage le handicapé non comme un "beau cas" mais comme une entité.

We are all manufacturers — making good, making trouble, or making excuses.

Public Health Nursing

Treatment is Fun

HELEN G. MCARTHUR, M.A.

THE POLIOMYELITIS epidemic reached unprecedented proportions in Manitoba in 1953. With over 2,300 cases the problems of treatment and rehabilitation taxed the ingenuity, resourcefulness, and energies of the professional group. They turned to the community for assistance in providing supplementary facilities and personnel for rehabilitation of patients who could not possibly be served adequately by the established institutions in Winnipeg. The project that followed made news by pioneering for the first time, in Canada, large-scale hydrotherapy for poliomyelitis victims. An average of 80 patients are now receiving hydrotherapy twice a week with an additional 40 once a week, following discharge from hospital. My opportunity to visit and study the development of this program was an experience in human relations. It is a demonstration of community cooperation that is hard to surpass.

ORGANIZATION

In October, 1953, the director of the Swimming and Water Safety Program, Manitoba Division, Canadian Red Cross Society, was consulted. The Society was happy to cooperate. They, in turn, called in representatives of the Crippled Children's Society and the Navy. It was soon determined that resources were available, if properly organized and supervised. The Swimming and Water Safety Committee was broadened to provide for all interests and professional advice, including representatives of the medical and nursing professions, physiotherapists, physical educationalists, professional swimmers, and lay groups. After discussion, responsibility and participation were divided as follows:

1. The medical group provides the patients and maintains over-all responsibility for them at all times. The hospital is responsible for anything that happens to the patient except when in transport between the hospital and the pool. The Crippled Children's Society has accident insurance covering this period.

2. The Crippled Children's Society provides transportation to and from the pool and wheel chairs at the pool.

3. The Navy made their pool available for use five mornings a week. In addition, available Navy lads willingly assisted in the loading and unloading of patients.

4. The Canadian Red Cross provides the over-all coordination and supervision of the program, volunteer instructors and volunteers for the dressing rooms and canteen. The program was in action three weeks after it was first suggested.

PROTECTIVE MEASURES

The interested parties requested the provincial Department of Health and Public Welfare to establish the safeguards necessary for the protection of the patients, the volunteers, and the public generally. In the main, the standards established were:

1. Before a patient enters the mass hydrotherapy plan there must be a lapse of two months from the date of onset of the disease.

2. The pool must be thoroughly checked by sanitary engineers as follows:

(a) The water should test for drinking water and a standard for chlorination was established at 1 part chlorine per million parts of water.

(b) All possible sources of cross connections checked and eliminated.

(c) Adequate hand-washing facilities provided in the washrooms and instruc-

Miss McArthur is national director of nursing services for the Canadian Red Cross Society.

tions given to all concerned on the importance of using them.

It was emphasized that the over-all sanitation standards are a medical responsibility. Sanitary engineers are responsible for seeing that the facilities are put in order and maintained to meet these standards.

Physical Facilities

Under the guidance of engineering authorities, the Navy made the pool suitable for this type of treatment. It is a standard pool with a recirculating system, changing water and filtering for at least one and up to three complete turnovers in 24 hours.

The following adjustments were necessary:

The water is heated to 90° F. Fortunately, the heating plant is adequate. It is, however, impossible to cool the pool down for use in the afternoon by other groups then get it heated again by the next morning.

Chlorination was stepped up from 0.6 to 1 part per million. There is a possibility of eye irritation with this concentration. All those using the pool were warned of this. There has been very little difficulty, fortunately.

Tests: Daily samples of water are taken after the occupants are in. The samples are taken from the surface where the highest concentration of contamination (saliva, etc.) would be. The standard bacteriological test for drinking water is used.

Cross connections: Two possible sources of contamination of the city's water supply were found. This is not uncommon though it is a simple thing to prevent if adequate advice is sought when the pools are built. In this instance the local health and engineering authorities corrected cross connections as follows:

(a) The "scum gutter" that takes off the surface saliva, etc., when splashing occurs, gradually lowered the level of the water in the pool. Fresh water was run in to make up the level through an ordinary valve. At this point, a direct connection with the fresh water supply made a cross connection.

(b) The filters were backwashed every two or three days by using the fresh water supply through an ordinary valve.

In both instances a tank was installed at the connection with a float valve and an air gap to provide an assured break.

Results: To date the tests have run better than those required for drinking water. Although polio was still appearing among the general public, no cases occurred among the numerous volunteers involved in this program nor the Navy personnel using the pool between treatment sessions.

Other physical facilities: Dressing rooms should be heated to about 90° to avoid rapid changes in temperatures. Facilities for both male and female patients are necessary with adequate space for wheel chairs to move about freely.

Canteen services are desirable for a cooling-off period before patients and other workers leave the building. This provides a rest period and helps prevent excess tiring of patients.

Ramps for the stairs were built by the Navy boys. Guards were provided on the ramps to prevent the worker handling the wheel chairs from slipping.

Equipment in the pool: The hand grip along the sides of the pool is out of the water and too high for the severely paralyzed patient. A hand grip, that could also be used as a foot grip for patients while floating, was built. This gave the instructor two free hands to support the patient in a floating position. These were inexpensively made from 1¼" pipe clamped to the regular handhold.

One set of parallel bars made from 1¼" pipe—20' long, 3' apart, and 3' high—was placed at the 5' water level. The bars were placed so as to leave a channel at each side for those who are permitted to go beyond the 5' depth.

Flotation devices such as plastic animals, split rings, and kickboards were available in quantity. Water pistols are favorites, providing hand exercises while at the same time contributing to the play periods.

Wheel chairs were provided to transport patients to and from cars, dressing rooms, and pools. It was found that having the patients bring their own wheel chairs caused difficulties in relation to time and space required.

Program Planning

In order to handle the desired number of patients it was recognized that the program must be carefully organized in every respect, all participants instructed in detail regarding their responsibilities, and a rigid time schedule maintained. The pool is used four mornings a week with three groups of 12-14 patients receiving treatment each morning. The majority take treatment twice a week, thus providing hydrotherapy for 72-84 patients weekly. Post-polio patients after discharge from hospital have periods on Saturday morning, when an additional 40 patients participate weekly. The major organizational responsibilities are as follows:

Hospital: The patients are always under the care of hospital personnel. Two additional full-time employees were provided to dress, carry and load them and to receive them on return and put them to bed. The arrangements provided:

(a) The prescription for treatment, made out by the director of physical medicine or physiotherapy staff, contains: Diagnosis (if deemed advisable); parts of the body involved; specific movements or positions desired; what movements or positions should *not* be given; what specific precautions should be taken; results expected; comments.

Under comments, warnings may be given. Patients who have had lung involvement may be treated only in the upright position to prevent them swallowing chlorinated water and so irritating respiratory passages.

(b) The director of physical medicine and/or the physiotherapists train the volunteer workers and provide supervision of all groups.

(c) The hospital provides a list of the patients to receive treatment *ahead of time* in order that the volunteer organization may plan to meet their needs.

(d) Suitable clothing: A type of zipper track suit with hood was found most suitable as it requires the minimum of handling.

Transportation: The Crippled Children's Society is kept informed as to the amount of transportation required, when and where.

Volunteers: The Canadian Red Cross Society accepted the responsibility for the over-all coordination and supervision of the project as follows:

Instructors in the pools: Even with 10 trained hydrotherapists it was impossible to do all that was necessary. Trained Red Cross swimming and water safety instructors were taught to give productive treatment to patients under the supervision of physiotherapists. Their course includes: a general outline of the program including their specific duties and responsibilities; film on hydrotherapy; exercising the patient by the physical training instructor from the hospital; practice periods in these skills; water therapy in rehabilitation by Dr. Desmarais, chief of physical medicine.

Following instruction, the volunteers and patients are paired. It is desirable for the same person to handle and instruct the same patient as far as possible. They learn the best methods of handling their patient and the personal relationships that develop are helpful to the patient and satisfying to the volunteer. This is a long-term effort with morning duty required. This creates difficulties for the volunteers as this is their usual work period at home or office. Those who have accepted this assignment, however, have been able to see the results of their work. The majority did not even ask to be relieved over the Christmas holidays. The fall off in attendance has not been anything like the average for other volunteer programs. In spite of the extremes of temperature, the volunteers have remained healthy and many feel very fit.

Other volunteers are needed for the canteen, dressing rooms, and as pool side attendants to time the periods and serve those working in the pools.

Flotation devices and adequate clothing and towels are at the pool. Laundry facilities have been provided by the Navy.

Adequate records have been developed by the committee to facilitate the over-all organization of the program and to keep all participating groups fully informed.

Program in the Pool

The program was started with a few healthy patients. As the instructors became more adept the program was stepped up. Instructors usually work twice a week. They find they can only work 45 minutes at a time in 90° F. water. At first, the patients are in the water for 10 minutes. This is gradually increased to 20 minutes.

9:10 a.m. 1. Patient arrives and goes to dressing room and to pool.

9:20 a.m. 2. Generalized class for whole group.

3. Individual treatment.

4. Few minutes of play; anything the patient likes to do but under supervision.

9:40 a.m. 5. Dried and dressed.

6. Canteen.

10:10 a.m. 7. Transported back to hospital.

The timing is very strict and the pool side attendant is responsible to see that the schedule is maintained.

Post-Polio Program

The pool is reserved each Saturday morning for post-polio patients who have been discharged from hospital. The hospital no longer plays the major role except that the committee is the same for both programs. The work is supervised by volunteer physiotherapists. The patients are cleared and referred through the Crippled Children's Society. The Junior Chamber of Commerce provides volunteers for such activities as checking in, loading and unloading patients, and pool attendants. The Red Cross continues to provide instructors and the essential follow-up.

Evaluation

An evaluation of the program was started early. Reports on the effectiveness of the treatment are obtained from the physicians, parents, guardians, wife or husband, pupils (18 years and over), instructors, and the sponsoring organization. These are compiled and presented to the committee. The evaluation is in its infancy at this time as rehabilitation can only be considered from a long-term view. It is hoped, however, that in time it will be possible to clearly demonstrate the full value of this type of program.

Conclusion

Is this the answer for the rehabilitation of poliomyelitis patients in large numbers? The place of the volunteer in such a program cannot be overestimated but there are some major weaknesses:

The swimming facilities should be in or nearer the hospital for several reasons:

(a) The distances that the patients must be moved takes time and limits the number that can be handled.

(b) The dressing and undressing is tiring for the patient and to some extent offsets the benefits of the treatment.

(c) There is greater danger of chilling when the patient must be taken out in sub-zero weather after treatment in 90° temperatures.

Problems also occur in the preparation of volunteer instructors when the pools are used for treatment and not available for regular programs and swimming instruction.

There is a great need for trained personnel for rehabilitation. The need for more experienced physiotherapists is evident. Positions must be created to meet the needs for such programs and the demand will bring more recruits to this most satisfying field of work. A program of rehabilitation will always need many volunteers but it would be easier for all concerned and more effective treatment would be forthcoming if the number of professional personnel to train, supervise, and give active treatment were greatly increased. Hydrotherapy should be a continuing program for the rehabilitation of not only poliomyelitis but for arthritis and rheumatism. Paraplegics, after the early training period is over, also benefit from this type of therapy.

It is hoped that this pilot project will bring about community action which will result in adequate hydrotherapy pools being attached to hospitals. One of the poliomyelitis victims of 1952, in spite of extensive involvement of both legs following hospitalization for a year, reported for duty as a Red Cross volunteer swimming instructor in 1953. She has had the satisfaction of seeing others under her guidance gain the use of muscles, in some cases to an extent denied to her. She is having fun doing it just as the patients in hospital wait longingly for the day when they, too, can join in the fun at the pool.

"Treatment is fun" is the byword. This volunteer along with the parents of polio victims, professional workers and the volunteers in this program, as they stop for a cup of coffee or a breather from their work, are planning ways and means whereby they can eliminate these problems of rehabilitation in the future and give patients the resources they require.

Industrial Nursing

Human Relations

Elizabeth N. Weir

The name "industrial nurse" is new, the work is old. We are just a medium and a means to bring harmony and help to others remembering that harmony comes first. We truly help only when we enable another to help herself or himself.

Let us be gentle in our work, especially, gentle with our tongues. Illness and accidents are often symptoms of fear. When we have treated well and advised sparingly we derive satisfaction in our work.

Develop a listening ear but with caution because always in our work we have the talkers who tire and bore their fellow-workers and who often waste much of our time and energy.

There are many types of people and people have not changed through the ages. We should avail ourselves of the store of information in the classics. Read what others have observed and known—Shakespeare, Dr. Oliver Wendell Holmes, and Dr. Axel Munthe—for in our work we deal, principally, with people. These writers had an advanced knowledge of people.

Our health and our demonstration of health is of the utmost importance. Only with health of mind can we maintain a positive attitude to our work and to others. This positive attitude is so necessary, as we see only that which we are looking for.

Let us remember that lack of proper rest may make us depressed and with any degree of depression we tend to have a negative attitude. Symptoms of this negative attitude may be noted when we find we are talking too much, when we are judging others, and when we are criticizing without first quietly reasoning. Of course we are all guilty of this but let us keep it to a minimum.

We hear so much these days of good public relations. We cannot always teach good public relations but we can demonstrate them to the best of our ability so that others may learn, if it be their pleasure. Relations, good or bad, come first from the individual herself. Let us not feel that we are successful if we are liked, for always, there must be a balance or our work would be very flat indeed.

Mrs. Weir is an industrial nurse in Vancouver.

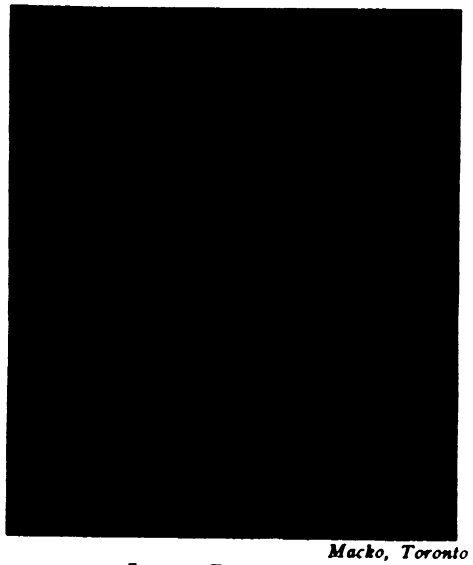
The Azores and the Canary Islands actually are mountain tops. They are points of the Dolphin Rise, the largest mountain range in the world. And it lies entirely under the sea, extending from the Arctic to the Antartic.

Nursing Profiles

Lyle M. Creelman has been appointed chief of the nursing division, World Health Organization. She will succeed Olive Baggallay in this position next month.

Born in Nova Scotia, Miss Creelman is a graduate of the Vancouver General Hospital and the University of British Columbia. She secured her M.A. from Teachers College, Columbia University, specializing in administration in public health nursing. She was director of public health nursing service with the Metropolitan Health Committee, Vancouver, at the time of her appointment to the responsibilities of chief nurse with UNRRA in the British Zone of occupation in Germany following World War II. In 1948 she collaborated with Dr. J. H. Baillie, of the Canadian Public Health Association, in making an intensive study of public health practice in Canada.

Miss Creelman joined the World Health Organization in 1949 as nursing consultant in maternal and child health. Since that time she has encircled the globe on visits to the numerous areas where nurses of many nations are assisting in the programs for the improvement of the health of the world's citizens. Canadian nurses are proud of the splendid leadership Miss Creelman is giving.



Macko, Toronto

LYLE CREELMAN

Mary P. Edwards is now director of nursing services with the Saskatchewan Department of Public Health.

As a child Miss Edwards moved from her native Northampton, England, to Saskatchewan, where she received her preliminary education. A graduate of the Regina General Hospital she secured her certificate in public health nursing from the University of British Columbia, later completing the requirements for her Bachelor of Nursing at the McGill School for Graduate Nurses. She also qualified in midwifery at the Maternity Centre, New York. Miss Edwards has been with the Saskatchewan department since 1942 — first as a staff nurse, then as a supervisor.

MARY P. EDWARDS

Muriel Jean Graham has returned to Canada following an assignment with the World Health Organization in Burma and has assumed her new duties as director of nurses at the Children's Hospital, Halifax, N.S. A native of Antigonish, Miss Graham received her arts degree from Saint Francis Xavier University there before commencing her nursing career. She graduated from Victoria General Hospital, Halifax, then proceeded to take the course in teaching and supervision at the McGill School for Graduate Nurses. Returning to Nova Scotia she was appointed registrar and executive secretary of the provincial nurses' association. She enlisted with the R.C.A.M.C. early in World War II and served in England and northwestern Europe.

Joining UNRRA after her discharge from the army, Miss Graham was sent to China where she engaged in nursing education for a year and a half. Returning to Canada, she went to the Children's Hospital as educational director and assistant superintendent of nurses. She joined the WHO field staff in 1950 and was sent to Rangoon to direct nursing education at the General Hospital.

Catherine M. Ross is a regional director with the National Office of the Victorian Order of Nurses for Canada. She has not been assigned to any particular region but will supplement the work of other directors as the need arises. A graduate of the Regina General Hospital, Miss Ross enrolled with the McGill School for Graduate Nurses where she secured her public health nursing certificate. She has had broad experience in various capacities with the Victorian Order of Nurses. She has been nurse in charge in Prince Albert, Sask., Medicine Hat, Alta., Richmond, B.C., Moose Jaw, Sask., and, until recently, in Surrey, B.C.

Horsdal, Ottawa

CATHERINE M. ROSS

Honora Susan Porritt is director of nursing and principal of the school of nursing at the Royal Columbian Hospital, New Westminster, B.C. An Ontarioan by birth and early education, Miss Porritt is a graduate from the Royal Jubilee Hospital, Victoria, and the certificate course in teaching and supervision of the University of British Columbia. In addition to a year's experience in private nursing she served as an instructor, later ward supervisor, then assistant director of nursing at R.J.H. Since 1950 she has been the assistant director at R.C.H.

A wide variety of handicrafts interest Miss Porritt in her off-duty hours including cabinet making. In this highly motorized era, she is unique in her love of walking.

H. SUSAN PORRITT

Emma Marion Schaab, who was medalist when she graduated from the Kitchener-Waterloo Hospital, was forced, by ill health, to resign from the superintendency of the Chesley and District Memorial Hospital, Ont. Five years ago when the new hospital was first opened, Miss Schaab was responsible for all the details of organization. The present smoothly operating institution is a great credit to her skill and ability. Previously she had held executive positions in the United States, at the Lord Dufferin Hospital, Orangeville, Ont., and at the Peel Memorial Hospital, Brampton, Ont.

Helen Marshall, who has taken up the duties of superintendent, has had varied experience. For seven years she served as matron in hospitals directed by the Department of National Health and Welfare. More recently she has been attached to the Ontario Department of Reform Institution serving as matron at hospitals connected with jails and prison farms.

Susan MacQueen has retired from the

post she has held for the past 25 years as superintendent of Sutherland Memorial Hospital, Pictou, N.S. Many tributes have been paid to the splendid work she has done all through this long and difficult period.

Marjorie Jones, formerly a supervisor at Jeffery Hale's Hospital, Quebec, has assumed her duties as the new superintendent.

In Memoriam

Shirley Bennett, a graduate of Misericordia General Hospital, Winnipeg, Man., died on March 13, 1954, after being ill for just over two months. She was 25 years of age. Miss Bennett was commissioned in the active force of the R.C.A.M.C. in June, 1953, and, prior to her illness, was on the staff of the Military Hospital, Camp Shilo, Man.

* * *

Ethel Rose (Cook) Cameron, who served with the C.A.M.C. during World War I, died in Regina on February 20, 1954.

* * *

Betty (Watson) Cook, who graduated from the Toronto General Hospital in 1934, died suddenly at Ithaca, N.Y., on January 19, 1954. Prior to her marriage, Mrs. Cook had been on the staff at T.G.H.

* * *

Pearl (Fraser) Doig, who graduated from the Toronto General Hospital in 1923, died suddenly at Woodstock, Ont., on January 1, 1954.

* * *

Isabell Fogarty, a graduate of the Ottawa General Hospital, died at Ottawa on March 22, 1954, following a lengthy illness. Miss Fogarty had engaged in private nursing during a long and active career.

* * *

Edna June Graham, who graduated from the Toronto General Hospital in 1949, died suddenly on March 14, 1954, at the age of 27. Miss Graham was on the staff of the out-patient department at T.G.H.

* * *

Helena E. (Adams) Lyman, who graduated from the Royal Victoria Hospital, Montreal, in 1899, died in Englewood, N.J., on April 20, 1954, at the age of 79. Prior to her marriage, Mrs. Lyman had been on the staff at R.V.H.

* * *

Alice (Stephen) McColl, who graduated from Royal Victoria Hospital, Montreal, in 1898, died in Montreal on March 10, 1954.

* * *

Minnie Ethel Misner, A.R.R.C., a graduate of Western Hospital, Toronto, Ont., died at Port Dover, Ont., on December 24, 1953. Miss Misner served overseas with the C.A.M.C. for four years during World War I. She had engaged in school nursing and later in industrial nursing prior to her retirement.

* * *

Jean (Rogers) O'Neill, who graduated from the Toronto General Hospital in 1932, died at Collingwood, Ont., on September 5, 1953.

* * *

Winnie (Shaw) Purcell, who graduated from the Chipman Memorial Hospital, St. Stephen, N.B., in 1930, died there on February 24, 1954, at the age of 45. Married soon after she graduated, Mrs. Purcell returned to nursing in 1944, joining the hospital staff as a floor supervisor.

* * *

Marjorie Gatenby Ryan, who graduated from the Winnipeg General Hospital in 1931, died there on March 20, 1954. Miss Ryan served overseas with No. 22 Canadian General Hospital during World War II. Since 1947 she had been a member of the operating room staff of the Deer Lodge Hospital, Winnipeg.

* * *

Alice L. Wallace, who graduated from the Grant MacDonald School of Nursing of the Queen Elizabeth Hospital, Toronto, in 1933, died there on February 5, 1954. Mrs. Wallace had been on the staff at Q.E.H. since graduation, serving as night supervisor since 1940.

* * *

A new recruitment film, "When You Choose Nursing," prepared by the Committee on Careers of the National League for Nursing, is now available. The film is 20 minutes long and it can be purchased at the cost price of $35 per 16mm. film from the headquarters office at **2 Park Ave., New York 16, N.Y.**

News and Echoes

from

Your NATIONAL OFFICE

University Programs in Nursing Education

At this time of year new calendars from University Schools of Nursing are being released. Two in particular have come to our attention within the last month.

At the *University of British Columbia* a considerable change has been made in the basic professional nursing curriculum. Following completion of senior matriculation in high school or first-year arts and science at the university, the School of Nursing is now offering a four-year program leading to a Bachelor of Science in Nursing (B.S.N.). Upon graduation these students will be qualified for staff positions in public health agencies and hospitals. The arrangement of the curriculum is such that in first-year nursing the students take courses related to nursing and further study of general courses.

At the end of the academic year they enter the Vancouver General Hospital for an orientation period of approximately three weeks. When this has been successfully completed, they enter the clinical portion of the program for a period of 28 months, including three months' vacation. During this time the program is planned in cooperation with the Vancouver General Hospital and other hospitals and health agencies in order that the students may have an opportunity to develop their knowledge of and skill in the practice of nursing.

The final year, during which the student is again on the campus, provides courses and additional experience in nursing so that graduates may undertake staff nursing in public health agencies as well as hospitals. With this background it is possible for those with ability to progress through appropriate experience to positions of greater responsibility. Although specialization has been removed from the final year of the basic professional degree course, the University of British Columbia will continue to offer courses designed for graduate nurses who do not intend to complete requirements for the bachelor's degree but wish to function as staff nurses in public health or in administrative, supervisory, or teaching activities in hospital.

The School of Nursing of the *University of Toronto* has rearranged its basic degree course so that it comprises 40 months exclusive of vacation. Courses in nursing will be carried along with other university courses during the regular academic year. Clinical practice has been arranged in uninterrupted blocks following the academic sessions of each of four years. After each clinical block a vacation will be given. Thus the students will, for seven months of the year, attend classes at the university under conditions comparable to those of students taking any other course with time to participate in the extracurricular activities of campus life. During the other months they will be able to gain the necessary clinical experience to prepare themselves for the practice of nursing.

Those responsible for the basic courses mentioned above are striving to prepare nurses for service in the community, both in and outside the hospital, utilizing sound educational practices. Our universities are giving leadership in the implementation of one of the C.N.A.'s most important policies in nursing education:

> The preparation of the nurse should be an educational experience and the method by which this can best be achieved is through an independent school which plans and controls the complete experience of the student.

This principle was demonstrated successfully in a hospital school of nursing by the Canadian Red Cross

Society-C.N.A. sponsored Metropolitan School of Nursing in Windsor, Ontario, which functioned from January, 1948, until September, 1952. As an objective evaluation of the Demonstration School showed that it was possible to prepare a skilled clinical nurse in a period shorter than three years *if the school is given control of the use of the student's time,* further application of this principle is taking place in other university and hospital schools.

Congratulations!

We at National Office would like to express our best wishes to all those graduating from our schools of nursing at this time. It is our earnest desire to give these, our newest C.N.A. members, every possible assistance in their professional careers.

Nouvelles et Echos

L'Education en Nursing dans nos Universites

A ce temps de l'année, les prospectus des universités nous arrivent et, parmi ceux que nous avons reçu, deux ont retenu notre attention.

A *l'Université de la Colombie Britannique,* les changements apportés au programme de nos écoles d'infirmières universitaires sont considérables. L'université offre aux jeunes filles qui ont terminé leur 12e année (senior matriculation), ou la première année du baccalauréat es art et science, un cours de quatre ans qui leur donnera un baccalauréat en sciences du nursing. Une fois diplômées ces infirmières peuvent faire du service général, en hygiène publique ou dans les hôpitaux. Le programme est arrangé de façon que durant la première année les étudiantes apprennent les matières se rapportant au nursing en plus de certaines autres matières.

Après l'année d'académique les étudiantes ont une période d'orientation à l'Hôpital Général de Vancouver. Une fois ce stage terminé, elles commencent leur expérience clinique laquelle dure 28 mois dont trois de vacances. Le programme a été arrangé, avec la coopération de l'Hôpital Général de Vancouver, d'autres hôpitaux et agences, de façon à donner aux étudiantes l'occasion de développer leur connaissance et leur habilité dans la pratique du nursing.

Durant la dernière année du cours passée à l'université, l'on donne aux étudiantes des cours et une expérience qui leur permettent de travailler une fois diplomées. Cette préparation permet aux infirmières, après avoir acquis l'expérience voulue, l'accès à des postes de plus grande responsabilités. Bien que les cours spéciaux aient été supprimés durant la dernière année du cours universitaire, ils seront encore offerts aux infirmières qui n'ambitionnent pas d'obtenir un baccalauréat en nursing mais désirant se préparer au travail d'infirmière hygiéniste ou à l'administration, la surveillance et l'enseignement dans les hôpitaux.

A *l'Université de Toronto,* l'école d'infirmière a refait le programme du cours conduisant au baccalauréat. Les cours de nursing seront donnés avec les autres cours de l'université durant l'année académique. L'expérience clinique consiste en quatre périodes données à la fin de l'année académique; la durée totale du cours est de 40 mois. Les étudiantes suivront donc, durant sept mois, les cours de l'université et participeront ainsi aux activités comme toutes les autres étudiantes. Durant les autres mois elles acquéreront l'expérience qui les préparera à l'exercice du nursing.

Ce programme tend à préparer, par de bonnes méthodes d'enseignement, des infirmières pour le service à l'hôpital et dans la communauté. Nos universités sont les premières à mettre en pratique l'une des recommandations de l'Association des Infirmières Canadiennes:

"La formation de l'infirmière doit relever du domaine de l'éducation. Le meilleur moyen par lequel on pourrait mieux réaliser cet objectif serait par l'établissement d'écoles indépendantes qui organiseraient et dirigeraient la formation complète des étudiantes."

La valeur de ce principe a été démontrée au Metropolitan School of Nursing de Windsor. Cette expérience, réalisée grâce à la générosité de la Croix-Rouge et de l'Association des Infirmières Canadiennes de janvier, 1948, à septembre, 1952, a démontré

(Suite à la page 496)

Student Nurses

Bulbar Poliomyelitis

EUNICE O'ROURKE

MR. PALMER WAS ADMITTED to a general hospital at 6:30 p.m., complaining of headache, hoarse voice, and difficulty in breathing. His back and limbs ached. His left arm, in particular, felt weak and useless. He was transferred almost immediately to the isolation hospital where a diagnosis of high spinal, low bulbar acute poliomyelitis was made.

HISTORY

A capable business man, aged 34, Mr. Palmer had served four years in the Royal Canadian Navy without illness or injury. He has a happy home environment, good health habits, and an excellent outlook on life—a valuable factor in his ultimate recovery. Despite periodic periods of depression his above-average intelligence made him strive eagerly towards recovery.

The onset of the present symptoms was sudden. Fortunately, though Mr. Palmer's contact was unknown, his wife and children were not infected. With rare foresight, he had taken out polio insurance which paid his entire hospital bill, including the services of a special nurse.

PHYSICAL EXAMINATION

Mr. Palmer's breathing was rapid and irregular though there was no cyanosis when the initial examination was made. The pharynx was slightly red, the tongue coated and an offensive odor was on his breath. His voice was so hoarse he could only whisper. The palate moved well and the swallowing reflexes were active. The chest walls expanded equally and the diaphragm appeared to move well.

The bilateral weakness that was beginning in his arms suggested involvement of some of the cervical nerves. There was also slight to moderate weakness in both sternocleidomastoid muscles. The facial nerves appeared to be intact.

LABORATORY REPORTS

Most of the routine tests were normal:

Hematology — Hemoglobin 108%; white blood cells 9,450; sedimentation rate 6 mm. Urine — amber, specific gravity 1.022, negative.

Pandy's test (one cc. of the reagent to which one drop of spinal fluid is added) was positive, indicating the presence of increased protein — 60 mg. %.

Two months later the laboratory examinations disclosed a slight drop in the hemoglobin — 95% — and an increase in the sedimentation rate. The urinalysis report showed the presence of much amorphous debris and occasional W.B.C.

TREATMENT

A happy, reassuring atmosphere to ensure mental rest was the first essential. Mr. Palmer was placed in a respirator as soon as possible but was closely observed both before and after for respiratory distress. Blood pressure readings were made every four hours for the first 48 hours. It was essential to watch elimination carefully with accurate measurements of intake and output. His bed had a firm mattress with a well placed foot-board. Foments were applied to such of the affected areas as could be reached satisfactorily. Usually foments are omitted in the treatment of these high bulbar patients.

Diet: Fluids may be given orally if tolerated or by gavage if necessary. Occasionally intravenous therapy may have to be used. Gradually the food intake is increased to strained or pureed comestibles, then to a full diet.

Miss O'Rourke is a 1954 graduate of Misericordia General Hospital, Winnipeg, Man.

Medications: Since there is no specific drug that will combat poliomyelitis, the chief essential is to provide sedatives as required. Seconal sodium and demerol were tried, somewhat unsuccessfully, to induce sleep when Mr. Palmer was out of the respirator.

Nursing Care

The primary objectives of any good nursing care are: To maintain the physical and mental comfort of the patient; to prevent complications; and to aid in the promotion of recovery and, ultimately, good health.

The application of these purposes in caring for Mr. Palmer was aided greatly by his understanding of the importance of his own cooperation. He was particularly eager to make progress since he was in a room where two of the patients were totally paralyzed and will be in respirators for the remainder of their lives.

It was very essential to have all the articles necessary for care assembled before the respirator was opened. Two nurses worked quickly each time giving good skin, oral and nasal care. Mr. Palmer was three months in the respirator. During that time some complications developed, including acute catarrhal inflammation of the canal of the left ear; phlebitis in the right cephalic vein; loss of speech; loss of swallowing reflex; and pressure sores on his shoulders as he rubbed against the wall of the respirator.

Because of the difficulty in breathing, a tracheotomy tube had been inserted. This required special care. Changing the tube and suctioning were accomplished when necessary, the nurse aiding the doctor in this.

As increased movement developed in his extremities, Mr. Palmer was encouraged to stay out of the respirator for longer periods. He was more at ease mentally as he was assured of the progress and improvement he was making. Visitors were permitted for two hours each day but the chief source of amusement and interest was the radio. Very few patients confined to respirators learn to read in the mirror arrangement so a regular feature of each day's program was opening and reading Mr. Palmer's mail to him.

Physiotherapy was an important

part of the daily care. Later, as Mr. Palmer began to use his hands again, occupational therapy to suit his strength was instituted.

Medical Future

When bulbar and spinal polio occur at the same time, the prognosis is poor. Usually, if a patient cannot leave the respirator within two years, he is doomed to remain there as long as he lives. Happily, not all cases result in permanent paralysis. During the first four months many patients improve rapidly and paralysis disappears.

It is probable that Mr. Palmer will have to return to the hospital frequently for air tracings. These are made by a machine that shows graphically the amount of air inhaled. He may tire easily after a long session of talking.

Very strict care will be necessary to avoid colds. Mr. Palmer realizes the risk of pneumonia if a serious chest condition should develop. He must take precautions against overtiring himself as this predisposes him to the conditions he must prevent. Fortunately his occupation is not hazardous to his health so he should be able to return to it providing he has an assistant to do any heavy physical work.

Conclusion

In addition to learning how to care for a patient in a respirator this study has emphasized the value of learning to anticipate the patient's needs as many of them are unable to speak. I have learned a certain amount of lip-reading that will be helpful with similarly afflicted persons in the future.

Caring for severely affected polio victims is bound to be depressing in a very short time. A good nurse will learn not to show her feelings and to always maintain a cheerful front before the patients and their families. One is impressed with the necessity of keeping the atmosphere in the ward friendly, encouraging and happy.

Hotel rates for delegates to the eighth national convention held in Halifax, N.S., from July 8 to 11, 1914, were $2.00 per day for single rooms with a 10 per cent discount for double occupancy!

Meeting in Newfoundland

ON MARCH 22, 1954, the first general meeting of the Association of Registered Nurses of Newfoundland was held in St. John's. There were approximately 150 nurses present.

Reports were given on the activities of the Provisional Council which was appointed in January, 1954, to carry on the work of the Association until the election of the first Council. The chairman of the Provisional Council, Miss Elizabeth Summers, spoke of the significance of this first meeting, it being an important stage in the professional life of Newfoundland nurses. She also stressed the need for a realization of the scope of the new responsibilities laid on the profession, and for active participation by all nurses in living up to these responsibilities.

The executive secretary reported that there were 525 nurses registered to date, 61 of whom were inactive.

The most important business was the presentation of the By-laws to the membership. These were accepted by unanimous vote, after they had been considered in detail.

The nominating committee, Mrs. Marie Bonia and Miss Emily Neville, presented their report and the election of the new Council then took place, with the following result:

Officers: President, Miss Elizabeth Summers; first vice-president, Miss Janet Story; second vice-president, Miss Glenna Rowsell; third vice-president, Miss Mary Feehan.

Councillors: Major Hannah Janes, Miss Rosemary Harvey, Miss Phyllis Godden; Miss Phyllis Wylie, representative, St. John's Chapter; Miss Ramona Osmond, representative, Corner Brook Chapter; Sister Mary Xaverius, representative, nursing sisterhood.

When the new officers were installed, the president thanked the members on behalf of the Council for their expression of confidence. New business consisted of the appointment of auditors for the year, and the presentation of a resolution which was given unanimous approval and which reads as follows:

"WHEREAS, During the preliminary study undertaken in the drawing up of the Act and By-laws of this Association, there was a need felt for the experience and guidance

of someone familiar with such matters; and

"WHEREAS, Miss Margaret Kerr, editor and business manager of *The Canadian Nurse*, gave most willingly of her time and advice when so asked to assist the committee responsible; and

"WHEREAS, It is felt that as a result of this assistance, given in such a generous and enthusiastic manner, the committee and ultimately the Association as a whole benefited to such a degree that it was possible to continue with the plans that eventually resulted in the formation of this Association of which we can be justly proud; therefore be it

"*Resolved*, That Miss Margaret Kerr be granted Honorary Membership in the Association of Registered Nurses of Newfoundland as a gesture of appreciation to her from the membership, on this the first general meeting of the Association.

"While conferring honorary membership upon Miss Kerr, the Association of Registered Nurses of Newfoundland recognizes that it is indebted to other members of the Canadian Nurses' Association for invaluable assistance and advice, particularly to Miss Gertrude Hall, former general secretary-treasurer, and the Executive Committee under the presidency of both Miss Ethel Cryderman and Miss Helen McArthur. In Miss Pearl Stiver the Council and members appreciated in full the importance of having such a pleasant and interested person as she has proven herself to be, in the many problems that were met in the final work of the formation of the Association of Registered Nurses of Newfoundland."

PAULINE LARACY
Executive Secretary

Alberta

The following is news concerning the staff changes in the Alberta Division of Public Health Nursing:

Appointments: *Brigitte Bomngardt* (Erfurt, Thuringia, Germany) to Grassland; *Mrs. Ann Border* to the Nursing Office (full-time); *Elizabeth Hillman* (Queen Elizabeth Hosp., Birmingham, and Simpson's Maternity Pavilion, Edinburgh) to Breton; *Louise Schepers* (Edmonton Gen. Hosp.) to Fort Assiniboine; *Lydia Thompson* (Leeds Gen. Infirmary and Glasgow Rural Maternity Hosp.) to Alder Flats; *Elsie Triska* (E.G.H.) to Worsley.

Transfers: *Mrs. Katherine Baker* from Foremost to Milk River; *Marguerite Boutry* from Worsley to Vauxhall; *A. D. Engelecke* from Fort Assiniboine to Tomahawk; *J. Gavigan* from Plamondon to Foremost; *Mrs. Helen Sabin* from Breton to Winfield as municipal nurse.

Resignations: *Beth Gibson* from Warner to join the Calgary school health service; *Edna (Drake) Hunter* from Tomahawk; *M. Molloy* from Milk River to return to hospital field; *E. Turner* from Alder Flats to go into business; *Mrs. Elodie Key.*

Nouvelles et Echos

(Suite de la page 488)

qu'il était possible de préparer de bonnes infirmières dans moins de trois ans *si l'école a le contrôle de l'emploi du temps des étudiantes.* L'application de ce principe se continue dans d'autres universités et écoles attachées à des hôpitaux.

Felicitations!

Le Secrétariat de l'A.I.C. désire offrir ses voeux aux nouvelles diplômées de nos écoles d'infirmières. Nous voulons assurer à ces nouveaux membres de l'A.I.C. l'assurance de notre entière coopération.

Chez les Notres

L'Association des Infimières de la Province de Québec vient de publier la deuxième édition française de "L'Infirmière en Chirurgie" de Eliason, Ferguson et Sholtis. Une attention spéciale est portée au psychisme du malade, à son milieu et à sa réhabilitation.

Honneur au Merite

Les finissantes des écoles d'infirmières de langue anglaise et des écoles affiliées à l'Université Laval et de Montréal ont été invitées par l'A.I.P.Q. à participer à un concours sur un sujet donné. Cette année le sujet était "L'Histoire de l'Association des Infirmières de la Province de Québec — Ses Fonctions et ses Relations Extérieures." Le premier prix fut remporté par Mlle Stella Cyr de l'Hôpital de l'Enfant-Jésus. Mlles Cécile Asselin de l'école de l'Hôpital Notre-Dame et Mlle Shirley Tinkler du Queen Elizabeth Hospital furent aussi parmi les lauréates.

A survey of Canada's 3,641,000 households last September showed that:

9% were without electricity.
23% were without running water.
49% were without central heating
4% were without radios
18% were without powered washing machines
33% were without telephones
34% were without mechanical refrigerators
34% were without sewing machines
42% were without electric or gas ranges
52% were without vacuum cleaners
48% were without cars.

* * *

The industrial nurse should realize that listening is frequently more useful than giving advice. The troubled people who come to share their problems rarely desire actual advice but rather the opportunity to talk freely, to release pent-up emotions, to give voice to tortuous thoughts, and thereby to gain relief and fresh impetus to work out their own solutions. A word of assurance alone may be the deciding factor in relieving many of these people of their forebodings and anxieties.

— Doris Perkins in *Nursing World*

Ontario

The following are staff changes in the Ontario Public Health Nursing Services:

Appointments—*Mary (Buchanan) Brackenborough,* formerly with Peel County health unit, *Ruth (Fair) Newman,* formerly with York Township board of health, *Eulalie Brown* (Toronto Gen. Hosp. and University of Toronto general course), *Norma Joyce* (Women's College Hosp. and U. of T. gen. course) and *Mary Sirrs* (Toronto Western Hosp. and University of Western Ontario certificate course), all to North York Township board of health; *Irene Hedges,* formerly with Scarborough Township board of health, and *Ilean (Gibson) Hawkin* (Hamilton Gen. Hosp. and U. of T. gen. course), to Peel Co. health unit; *Presentine Perrin,* formerly with Ottawa board of health, to Eastview board of health; *Margaret (Bridges) McKeachnie,* formerly with Northumberland-Durham health unit, to Porcupine health unit; *Ellen Fuller* and *Ruth Baddeley,*

formerly with Fort William and district health unit, to York Township board of health; *Grace Walters,* formerly with York Co. health unit, to Northumberland-Durham health unit; *Louise Brown,* formerly with Wellington Co. health unit, to Brant Co. health unit; *Bertha (Waldron) Young,* formerly with Prescott board of health, to Strathroy board of health; *Gladys Aylsworth* (T.G.H. and U. of T. gen. course) to Prince Edward Co. health unit; *Patricia Boug* (Victoria Hosp., London, Ont., and U.W.O. cert. course) to Huron Co. health unit; *Catherine Boyko* (Misericordia Hosp., Edmonton, and McGill University public health nursing course) and *Olive Erb* (B.Sc.N., U. of T.) to York Co. health unit; *Ann Cowan* (B.Sc.N., U. of T.) to Lambton health unit; *Blanche (Hepburn) Gordon* (T.W.H. and U. of T. gen. course) to Peterborough board of health; *Catherine Vaughan* (Hosp. for Sick Children, Toronto, and Queen's University cert. course) to St. Catharines-Lincoln health unit.

Resignations—*Noella Bellemare* and *Rejeanne Lepage* from Prescott and Russell health unit; *Frances Blue* from Peterborough board of health; *Carol Brice* and *Vera Freeman* from North York Township board of health; *Marian Cuthbertson* from Leeds and Grenville health unit; *Jean (Taylor) Eagle* and *Marion (Granger) Greenwood* from Etobicoke Township board of health; *Dorothea Flood* from Leeds and Grenville health unit; *Frances (Orr) Ham* from Northumberland-Durham health unit; *Ann Jack* and *Mary Lankin* from Hamilton Dept. of Health; *Barbara (Cox) Kirkpatrick* from Peel Co. health unit; *Eleanor (Fendley) McComb* from St. Catharines-Lincoln health unit; *Thelma Ross* from Fort William and district health unit; *Grace (Cameron) Schell* from Scarborough board of health; *Helen (Black) Selman* from East York-Leaside health unit; *Mary Shaver* from York Co. health unit; *Isabelle Sorley* from Timiskaming health unit; *Margaret (Vail) Steeper* from Middlesex Co. school health service; *Lucille Tracey* from Simcoe Co. health unit.

Victorian Order of Nurses

The following are staff changes in the Victorian Order of Nurses for Canada:

Appointments—Chatham, Ont.: *Dona Nash* (St. Joseph's Hosp., Chatham). Galt: *Eleanor MacDougall* (Ottawa Civic Hosp.). Greater Niagara: *Gertruida Pennings* (Hosp. St. Joh de Deo Westeinde, The Hague, Holland). Hamilton: *Ethel Hounslow* (Brantford Gen. Hosp.); *Joyce Wichman* (McMaster University School of Nursing and Hamilton Gen. Hosp.). North York: *Dorothy Williamson* (St. Joseph's Hosp., Sudbury). Ottawa: *Patricia Ball* (St. Mary's Hosp., Montreal); *Doreen Corbin* (Hôtel-Dieu, Kingston); *Miriam Creelman* (St. Paul's Hosp., Vancouver); *Marguerite Edwards* (Toronto Gen. Hosp.); *Helen Servage* (Hôtel-Dieu, Cornwall). Port Arthur: *D. Scarcello* (St. Joseph's Hosp., Port Arthur). Saint John, N.B.: *Lois E. Thomas* (Saint John Gen. Hosp.). Toronto: *I. Poulson* (Alder Hey Hosp., Liverpool, Eng.); *M. Salmon* (Toronto East Gen. Hosp.); *M. C. Shaw* (St. Andrew's Hosp., London, Eng.); *Elma Toews* (Winnipeg Gen. Hosp.). Truro, N.S.: *Joyce Tanner* (Children's Hosp., Halifax). Vancouver: *Kathleen Old (T.G.H.)* West Vancouver: *Irene Fairley* (Royal Alexandra Hosp., Edmonton). Winnipeg: *Shirley Manhard* (Winnipeg Gen. Hosp.).

Reappointments — Montreal: *Blanche MacPherson* (Ottawa Civic Hosp.).

Canadian Red Cross Society

The following are staff changes in the Provincial Divisions of the Canadian Red Cross Society:

BRITISH COLUMBIA

APPOINTMENTS — Lillooet: *Joan Allson* (Royal Melbourne Hosp., Australia). McBride: *Beulah Gibson* (Palmerston North Public Hosp., New Zealand).

TRANSFER — *Mona J. Mitchell* from McBride to Lone Butte.

LEAVE OF ABSENCE — *Sara A. Miller.*

RESIGNATIONS — Lillooet: *Margaret B. Colwell* to be married. Lone Butte: *Mrs. James Mackie.* McBride: *Betty Balch* to be married.

ONTARIO

APPOINTMENTS — Bancroft: *Olive Thorogood* (South-end-on-Sea) and *Bridget Hannan* (Hamstead Gen. Hosp.). Beardmore: *Mary Elliott* (City Hosp., Belfast, Ireland). Englehart: *Nina Teders* (German Hosp., Eng.); *Jessie Boyd* and *Jean Brown* (Royal Infirmary). Red Lake: *Jessie Cunningham* (Victoria Infirmary, Glasgow) and *Margaret Dunlop* (Glasgow Royal Infirmary). Thessalon: *Louise Bryant* (McMaster University, Hamilton).

TRANSFERS — *Esther Pedersen* to Beardmore, *Janet Proudlock* to Haliburton, both as nurse in charge; *Gladys Chapman* to Nakina; *Bernice Dale* to Port Loring; *Louise Grover* to Thessalon; *Irene Hart* from Bancroft to Englehart.

RESIGNATIONS — Beardmore: *Bernice Kent.* Burk's Falls: *Sylvia Leighton.* Haliburton: *Violet Fruin.* Nipigon: *Irene Phillips* to be married; *Mrs. Catherine Philip.*

QUEBEC

APPOINTMENTS — Douglastown, Gaspé: *Monique Drouin* (Notre Dame Hosp.). Grande Entrée, Magdalen Islands: *Patricia Sirois* (Long Island, N.Y.).

LEAVE OF ABSENCE — Barachois: *Françoise Liautaud* to study with Dept. of Health, Montreal.

RESIGNATIONS — Douglastown: *Thérèse Drouin.*

News Notes

ALBERTA

DISTRICT 1

GRANDE PRAIRIE

Activities of the chapter during 1953 included the purchase of reference books for the nurses' library and representation at the annual convention in Banff. Among guest speakers at meetings were: L. Kremer and Mr. E. Leger on Civil Defence; Dr. Brooks showing a film on atomic warfare; C. W. Perkins, field representative for *The Canadian Nurse,* on the workings and purposes of the *Journal.* Of the 29 members enrolled, there was an average attendance of 12. The grand finale was a Christmas party. New officers are: President, I. Gow; vice-president, Mrs. W. Sharpe; secretary, Mrs. K. Murray; treasurer, Mrs. G. Turner.

DISTRICT 2

CAMROSE

The organizational meeting of the chapter was held in March with 31 nurses present. The officers elected are: Chairman, Sr. Geralda; vice-chairman, Mrs. A. Lemon; secretary-treasurer, Mrs. J. Young; program committee, B. Tiffin, Mmes Cloarec, M. Richardson. The "Camrose Chapter" includes the town and surrounding area. Meetings are open to all visiting nurses. The annual fee will be $1.00. A motion to accept

the by-laws as suggested by the A.A.R.N. was carried. The president will be the delegate to the C.N.A. Biennial Convention in Banff and a Pot Luck supper is being held to raise funds. The public relations office will be held by Mrs. Young.

DISTRICT 3

CALGARY

Most of the discussion at a recent meeting of the district centred on the C.N.A. Biennial Convention at Banff. Miss Van Norman of the General Hospital, guest speaker, chose the topic, "Social and Recreational Program for Student Nurses." A number of graduate nurses from the district and surrounding towns have completed the five-day institute on Team Nursing conducted by Miss E. Danielsen of Columbia University. The attendance at the carefully prepared and demonstrated course on "Care and Study of Polio" was most gratifying to those in charge.

Holy Cross Hospital

At the capping ceremony relatives and friends saw 36 students officially accepted as members of the school of nursing. Sr. M. Trottier, director of nurses, assisted by Mrs. E. Bland, educational director, presented the caps. M. Corns, president of the Student Council, conducted the candle-lighting ceremony and led the Jeanne Mance Pledge, later welcoming the new members. Mrs. Fish was the guest speaker and the student nurses served refreshments.

The Sisters and members of the faculty welcomed the new preliminary students at a tea attended by their Big Sisters during orientation week.

DISTRICT 5

HANNA

It was decided at a recent meeting of the district that regular meetings will be held the third Friday night of each month. M. Maze, Mmes B. Stephans, M. Hamilton volunteered for the program committee. Dr. Wilcox gave an interesting talk on the polio refresher course which he attended in Edmonton.

DISTRICT 7

EDMONTON

Two colored films highlighted a recent meeting of the district and followed a discussion of arrangements and tentative plans for the program for the C,N.A. Biennial Convention at Banff. Financial assistance was voted to the Westclock Chapter portion of the program and it was decided to give each of 12 delegates $50 to assist with expenses.

Approximately 100 nurses from all the city groups attended the "brunch" arranged by E. Lea. At a later meeting Dr. R. F. Taylor, medical director of the isolation hospital during the past outbreak of polio,

gave an interesting talk on that disease. At an executive meeting further plans were made concerning delegates to the Convention and the nurses' annual re-dedication service.

STONY PLAIN

An organizational meeting of the chapter was held in March and attended by 15 members. The election of officers, tabled until April, resulted as follows: President, Mrs. L. Willie; vice-president, M. Story; secretary-treasurer, Mrs. L. Phillips. Civil Defence organization will be the immediate primary objective and L. Kremer, with Mr. Kocherofsky and Rev. Janz, local coordinators, were invited to discuss the proposed program. Mrs. Willie will represent the Chapter at the C.N.A. Biennial Convention in Banff. The members are enthusiastically looking forward to a busy future.

BRITISH COLUMBIA

FRASER VALLEY DISTRICT

Preceding the business meeting of the district in March, a panel discussion on Civil Defence was attended by representatives from all the lower mainland groups. The members of the Chilliwack Chapter were hostesses with about 70 nurses present. On the panel discussing "How Can our Existing Medical Services be used in an Emergency?" were: Dr. J. L. M. Whitbread of the Upper Fraser Valley Health Unit; Dr. J. Wilford who took a course at Camp Borden on medical aspects of ABC warfare; and M. MacLachlan, coordinator of Civil Defence in the area. There was a question period and panel members stressed the importance of preparedness and the training of lay personnel as auxiliary workers. Mrs. A. Edmeston, chapter president, welcomed the visitors and K. Crowley introduced panel members. The business meeting was conducted by the district president, Mrs. E. Erickson, when the following officers were elected: President, I. Barlow; vice-presidents, Mrs. D. Slaughter, M. McGillivray; secretary, Mrs. E. A. Derrick; treasurer, M. McCartney; councillors, E. Janzow, P. Kahr. Miss Barlow was made official delegate to the C.N.A. Biennial Convention in Banff. Reports from New Westminster, Chilliwack, Mission, Haney, and South Fraser chapters were presented.

VANCOUVER ISLAND DISTRICT

Cowichan Chapter was hostess at a recent regular meeting of the district in Duncan. An interesting talk by Sir Philip Livingstone of Cowichan Bay on "Night Blindness," illustrated with films, followed the short business meeting.

WEST KOOTENAY DISTRICT

Seventy members from all district points attended the annual dinner and meeting held in Nelson. Two young guests provided musical entertainment and Mr. E. Gulley of the

Society of Friends was guest speaker, his topic being "Human Relations."

CHILLIWACK

Among activities of special interest at recent meetings of the chapter were: A presentation to past president, K. Crowley, in appreciation of her service; a letter to Dorothy Nicholson for obtaining the highest marks in the R.N. examinations; a two-year subscription to *The Canadian Nurse* to a nursing institution in Finland; the report by Mrs. F. Barwell who was instructor, assisted by L. Lockhart and Mrs. D. Shaw, on the completion of a course on aids for teaching home nursing in disaster. Mmes A. Edmeston and H. Bersea were chosen as delegates to the provincial convention. Mrs. G. Wilson was appointed honorary president, Mrs. M. Smithwick, honorary vice-president, and A. Henderson to the bursary committee. Following the business meetings, a film on cancer entitled "The Outlaw Within" was presented one evening and a review in part of the C.N.A. Structure Study, conducted by Miss Crowley and Mrs. D. Sache, on the other.

NANAIMO

At the April meeting of the chapter Mmes M. Bitton and Danes were appointed as delegates to the provincial convention in Vancouver and tentative plans for the annual bursary tea to be held in the fall were discussed. Guest speaker Mrs. J. Chataway of Lantzville gave a vivid account of her life and nursing experiences in East Kenya, Africa.

NELSON

Plans were made by the chapter to hold the annual dance in Hospital Week and E. Corbett was chosen delegate to the C.N.A. Biennial Convention in Banff. A shower for D. Wooley and a tea for F. Szostak and A. LaRivière were held recently.

NEW WESTMINSTER

Members of the South Fraser Chapter were very interested in the talk by Margery Hardy, psychiatric social worker at Woodlands School, at the regular meeting in April. The social problems necessitating the admission of mentally defective children to the school, as well as the effort being made to rehabilitate those with some training and socialization at the school, were well presented.

TRAIL

At a recent meeting of the chapter conducted by the president, A. Baker, it was decided to send a letter of thanks to Nelson Chapter for the successful district dinner held there. Trail Chapter will be hostess to the district in the fall. After the business meeting Miss Rivett showed films of her trip to Bermuda.

VANCOUVER

General Hospital

The main operating room has been remodelled to include six theatres, a plaster room, and an x-ray. It is decorated in restful greens and grays, with all the most modern innovations including air conditioning and an intercommunication system. Old Ward C has been converted into a post-anesthetic recovery room.

A program of volunteer work in the hospital is being organized by the alumnae. Members will not engage in actual nursing duties but will help to provide some form of entertainment, particularly for the "up" patients; write letters for or read to patients who are unable to do these things themselves; wash and pin-curl the hair for female patients, etc.

Ellen Corbet is working at Kootenay Lake General Hospital, Nelson, B.C. Gwen Jones has taken a course in surgery at St. Michael's Hospital, Toronto. Isobel Angus and Clara Gould are working at the Hospital for Sick Children, Toronto.

MANITOBA

BRANDON

About 40 members attended the April meeting of the Association of Graduate Nurses conducted by the president, Mrs. E. Hannah. L. Cullen attended a polio nursing institute in Winnipeg sponsored by the Manitoba Hospital Association and M.A.R.N. As a result, a local course of lectures was planned with Drs. V. Sharpe, J. Brown and Miss Stack-Haydeen, physiotherapist, taking part. Plans for the annual dinner and dance for the graduating classes of the local hospitals and Red Cross first aid classes were discussed.

WINNIPEG

General Hospital

Several members who attended the institute at the Municipal Hospitals took part in a panel discussion on poliomyelitis nursing at the April meeting. The annual spring tea was a marked success. Plans for the annual dinner and a reunion of Class '29 were discussed. One hundred dollars was given to Beulah Bourns, home on furlough, for the purchase of an automatic clothes dryer for Severance Hospital, Korea.

NEW BRUNSWICK

MONCTON

Following the completion of business at a regular meeting of the chapter recently conducted by the president, Mrs. N. Smith, members participated in a discussion of the C.N.A. Structure Study.

Nurses' Hospital Aid

The president, Mrs. J. Innes, conducted a

recent meeting of the Aid when reports were read by Mrs. B. Nash Smith on the Easter drawing and Mrs. C. McKee on the vanishing bridge. The mystery box was won by Mrs. S. Sinclair. Mmes H. Henderson and McKee were appointed conveners for the cooking sale. At an earlier meeting a demonstration of the needle cleaner, donated to the Moncton Hospital by the Aid, was given by Mrs. M. Wilbur.

NEWFOUNDLAND

ST. JOHN'S

In January, St. John's Chapter of the Association of Registered Nurses of Newfoundland was formed. E. Summers, chairman of the provisional council, opened the meeting and M. Feehan, chairman of the election committee, presided for the election of officers which resulted as follows: Chairman, Capt. M. Lydall; vice-chairman, H. Penney; secretary-treasurer, Mrs. H. Knight. Later R. Bishop was made program convener, Miss Penney, representative to *The Canadian Nurse*, and other committees were formed.

A shower for P. Laracy, executive secretary of the A.R.N.N., was a wonderful success, producing for use in her new office many gifts ranging from a doormat to an oil painting and including an electric kettle, china and silver for serving a cup of tea after a busy day. An informal dance, sponsored to provide funds to send a delegate to the C.N.A. Biennial Convention in Banff, had a capacity turnout and netted almost $600. Jean Lewis was elected delegate at the April meeting when a welcome visitor was D. Fowler, regional director for the V.O.N. in Nova Scotia and Newfoundland. In honor of her first visit the film, "The Big Island," was shown following two delightful solos by R. Morgan.

NOVA SCOTIA

HALIFAX

Victoria General Hospital

The combined spring and fall graduating class, as well as the alumnae associations of the Children's and Nova Scotia hospitals, were guests at a meeting of the V.G.H. alumnae recently. Mrs. H. S. T. Williams was elected president, replacing D. Wiswell who has been transferred to the west coast. The president welcomed the visiting groups and E. Graham, an older member, spoke to the graduating class. A variety show by the students replaced the usual professional entertainment.

ONTARIO

DISTRICT 2

BRANTFORD

General Hospital

On the occasion of their retirement recent-

ly, Dora Arnold and Gladys Westbrook, former superintendent and assistant superintendent of nurses, were entertained at a gathering of graduate nurses. In addition to corsages, luggage was presented to Miss Arnold by A. Scott and boudoir lights and a reading lamp to Miss Westbrook by D. Rashleigh. An evening of bowling and cards followed. Serving refreshments were: T. Giancola, W. Vaughan, M. McIvor, J. Spicer, A. Skirrow, N. James and Miss Scott.

DISTRICT 4

GRIMSBY

E. Ewart was in the chair at the annual district meeting. Encouraging reports of the past year's activities and the new slate of officers were presented. Miss Gayfer introduced the guest speaker, Christine Livingston, director in chief of the Victorian Order of Nurses, who chose as her topic "Continuing Care." In conclusion, Miss Livingston stated that "continuing care is a quality of nursing, not a specialty, and the essence of it is up to every individual nurse."

NIAGARA FALLS

An interesting hour was spent on floral arrangement at a flower shop prior to a recent well attended meeting of the Chapter. R. Brown was in the chair and P. Hobson convened the refreshments.

DISTRICT 5

TORONTO

General Hospital

The alumnae association is celebrating its Diamond Jubilee this year and a dinner is scheduled to take place at the Royal York Hotel. M. (Lumsden) Lempke, formerly with the Toronto Health Dept., is now at Providence Hospital, Columbia, South Carolina. J. Gauley is at the King Edward VII Memorial Hospital, Bermuda, while J. Hickling is national superintendent for the Prevention of Blindness with the C.N.I.B. Dr. Jessie Gray, the first woman to get a residency at T.G.H. and now chief of surgical staff at Women's College Hospital, has received a citation in recognition of her work on techniques in colon surgery in cancer. A. Graham is assistant director of nurses, Union Hospital, Moose Jaw.

St. Michael's Hospital

T. Kelly is on the staff of the V.O.N. in Vancouver. F. Brohman is stationed in Korea. Pat Smith is on duty at St. John's Hospital, Santa Monica, Calif. L. Archambault, formerly on the staff of St. Joseph's Hospital, is an industrial nurse at Swift Canadian Co. Ltd. while M. Cutler and R. Burns are doing staff duty at St. Joseph's Hospital, Comox, B.C. S. Lewis is serving with a Miami hospital.

Women's College Hospital

Vera Allen, the first alumnae member to

Every month dozens of copies are returned to us as undeliverable because the subscribers have failed to notify us of their new address when they have moved.

We have every facility for making *Changes of Address* quickly if we get them. Please send us both your old and new addresses for greater accuracy in making corrections.

But remember . . . we cannot even *guess* when and where you may move. Help us to keep your copies coming!

THE CANADIAN NURSE

receive the H. T. Meiklejohn Scholarship, has completed her year at W.C.H. and has joined the staff of the Toronto Psychiatric Hospital. Mrs. (Jones) Charles is nursing at Sutton, Ont. Mrs. (Wyatt) Crosby is president of the graduate nurses' association in Sarnia. A. von Tischler is obstetrical instructor at Columbia Memorial, Hudson, N.Y. M. Corestine is on the staff of T.G.H. Mrs. (Stephens) Gordon was in Toronto taking a course in public health. M. Maber has completed her course at Westminster Hospital, London, and has returned to the D.V.A. Hospital in Saskatoon. M. Powell is assistant supervisor on the third floor at W.C.H.

District 12

Kirkland Lake

The annual spring tea held in the Kirkland District Hospital nurses' residence on May 1 was convened by Mrs. J. Rhoten, public health supervisor, and was well attended. Tea was poured by four doctors' wives while guests were welcomed by E. McEachren, hospital superintendent, and Mrs. K. Farrell, Kirkland Lake Chapter president.

Fourteen nurses attended the Nurses' Annual Memorial and Rededication Service in May.

PRINCE EDWARD ISLAND

Charlottetown

An institute entitled "The Role of the Nurse in Medical Rehabilitation" was sponsored by the district. Planned by K. Jackson in conjunction with the nursing committee, the course was a series of six meetings and the subjects were divided as follows: Introducing Medical Rehabilitation; Rest and Exercise; Rehabilitation in: Pulmonary Tuberculosis, General Surgery, Rheumatic Conditions, and of the Permanently Disabled. General discussions followed the lectures and presentation of films. A resumé of methods used in and outside Canada with further suggestions for P.E.I. concluded the series.

Summerside

At a recent meeting of the district, the rummage sale was reported to have been a great success and films presented at the conclusion proved very interesting.

QUEBEC

Montreal

McGill School for Graduate Nurses

A panel discussion on "The Future of the McGill School for Graduate Nurses and the Alumnae Association" was held at a recent meeting of the alumnae association. Those participating were: Mrs. L. H. Fisher, E. Flanagan, R. Chittick, M. McKillop, G. Purcell. A fashion show by Henry Morgan & Co. Ltd., with Mrs. E. Trill as commentator, under the convenership of L. Ellis, proved very successful. A McGill breakfast at the C.N.A. Biennial Convention in Banff was planned.

Royal Victoria Hospital

The fashion show at a recent meeting of the alumnae association was a distinct success. A tea was held in honor of Fanny Munroe in April. The 96 members of the graduating class were guests at the annual alumnae dinner. Dr. Cyril James, principal

of McGill University, was guest speaker and the toast to the graduating class was given by Dr. C. A. McIntosh while M. Kenly responded. Other guests at the head table were: Dr. and Mrs. W. de M. Scriver, H. Lamont, and Mrs. C. Sutherland. Special guests were: C. V. Barrett, K. Marshall, C. Large, and G. Powell. Miss Powell, who has been on the staff of the cystoscopy service of the urology dept., is retiring after 24 years service in the hospital.

A tea in honor of those attending the reunion of Class '46C was held in April. Present were: E. (Hammond) Wood, M. (Campbell) Fisher, B. (Coyles) Bowker, M. (Cumming) Thwaites, M. (MacDonald) Chalmers, L. (McAvity) Worrall, M. (Stalker) Pritchard, E. (Windler) Dyer, I. (Wood) Judd, D. (Liddy) MacDonald, D. Styles.

E. (Mann) Goodyear is president and M. (MacDonald) Lewis, secretary of the newly formed alumnae chapter in Sydney, N.S. Eleanor Martin will be principal of a new school of nursing to be opened in Welisara, Ceylon, under the Colombo plan and Marjorie Hudson, the public health consultant.

Recent visitors to R.V.H. were E. McNeil and M. (Wainwright) Hoffman.

SASKATCHEWAN

Saskatoon

A regular meeting of the local chapter was held at the City Hospital when a talk on "Social Service Work for Children of Unmarried Parents" was given by Mrs. G. Teed.

City Hospital

The annual spring tea and bazaar was held in April when the guests were welcomed by Mrs. H. A. Armstrong, Misses R. Russell, I. Levorson, and L. Shackleton. Performing the tea honors were: Mmes H. Wilson, D. Ford, C. Orchard, L. Goluboff, W. Kinnear, and A. C. H. Wensley.

A meeting of the alumnae took the form of a Pot Luck supper, when a talk and demonstration on floral arrangements were given by Mr. F. Dowding.

Lena Polischuk is the nominee of the Local Council of Women as "Citizen of the Year" and will be a delegate to their annual convention to be held in Saskatoon.

St. Paul's Hospital

The usual graduation preparations and annual elections of student council and sodality executive heralded spring. The Easter concert put on by Class 1B was most successful. Sr. Longtin, who has celebrated her Golden Jubilee as a Grey Nun with a total of over 25 years service at St. Paul's, went to Montreal with Sr. Quintal. The latter planned to attend the Catholic Hospitals convention in Atlantic City.

Flight Lieut. Runa Church of Meota holds the post of matron of the R.C.A.F.'s tri-service hospital at Rockcliffe, Ont.

Positions Vacant

ADVERTISING RATES — *$5.00 for 3 lines or less; $1.00 for each additional line.*
U.S.A. & Foreign — *$7.50 for 3 lines or less; $1.50 for each additional line.*

Director of Nursing Education; Nursing Arts Instructor; Operating Room Supervisor. Nursing School — 65 students — with 1 class per yr. Good personnel policies & facilities. Full maintenance in residence if desired. Apply B. A. Beattie, Director of Nursing, Public General Hospital, Chatham, Ontario.

Asst. Director of Nursing (1 yr. post-graduate preferred). New 188-bed hospital. Excellent personnel policies include 2 wks. sick leave; 8 statutory holidays; 4 wks. vacation. Pension plan being introduced. Particulars of salary on request. Apply Director of Nursing, General Hospital, Stratford, Ont.

Science Instructor for Sept. 1 & **Registered Nurses (2) for General Staff in Operating Room** in June. Apply Director of Nursing, General & Marine Hospital, Owen Sound, Ont.

B.C. Civil Service requires: **Instructors Grade 1 (Staff Nursing)** for Provincial Mental Hospital, Essondale & The Woodlands School, New Westminster, B.C. Salary: $255-287 per mo. Applicants must be Registered Nurses currently registered in B.C. or eligible for registration in B.C.; diploma or degree in teaching & supervision acceptable to standards of nursing education in B.C.; minimum of 1 yr. experience in general nursing. Only British subjects under 40 years of age accepted, except in case of ex-service women. For application forms & further information apply B.C. Civil Service Commission, 411 Dunsmuir St., Vancouver 3, B.C.

Operating Room Nurse (experienced, preferably with post-graduate course). **Operating Room Staff Nurses.** Opportunity for advancement. Full maintenance. Travel allowance. State qualifications & date available. For full particulars write Matron, King Edward VII Memorial Hospital, Bermuda.

Public Health Nurses (bilingual) for Prescott & Russell Health Unit. Minimum salary: $2,600 with allowance for previous experience & annual increments. Car provided or allowance for own car. Blue Cross & sick leave. Apply Dr. R. G. Grenon, Director, Prescott & Russell Health Unit, Hawkesbury, Ont.

Public Health Nurses for generalized program in Township of Etobicoke (Toronto suburb). Minimum salary: $2,800. Allowance made for experience. Transportation allowance provided. Apply Medical Officer of Health, Township of Etobicoke, 4946 Dundas St. W., Toronto 18, Ont.

Public Health Nurse for generalized program in Alberta-East Central Health Unit (Stettler office). Minimum salary: $2,520. Experience recognized up to 3 yrs. Annual increments. Pension plan; Blue Cross. For details apply Dr. D. MacKay, Medical Officer of Health, Stettler, Alta.

Public Health Nurses (qualified & experienced). Salary schedule: $2,500-3,100 depending on experience. Annual increment, $100. Pension plan. Car provided or car allowance. Apply Dr. Charlotte M. Horner, Director, Northumberland-Durham Health Unit, Cobourg, Ontario.

Public Health Nurses (qualified) for generalized Public Health Nursing Service of City of Toronto, Dept. of Public Health. Salary range: $2,974-3,391. Starting salary based on experience. Annual increments. 5-day wk. Vacation, sick pay & pension plan benefits. Apply Personnel Dept., Room 320, City Hall, Toronto, Ont.

Public Health Nurses by Kenora-Keewatin-Dryden area Health Unit for vacancies in Dryden & Kenora. Minimum salary: $2,600. Transportation provided or car allowance. Kenora is situated on C.P.R. main line, 150 miles east of Winnipeg on beautiful Lake-of-the-Woods. For further information or application write Mr. D. T. McLeod, Sec.-Treas., Box 174, Kenora, Ont.

Registered Nurses for General Duty. 8-hr. day, 6-day wk.; rotating shifts. 1 week-end per mo. May live in residence. Apply Supt., St. Vincent de Paul Hospital, Brockville, Ontario.

THE CANADIAN NURSES' ASSOCIATION

desires applications for

BILINGUAL (FRENCH AND ENGLISH) NURSE

for position of

Professional Secretary in National Office.

Advanced preparation and experience in Administration or Supervision necessary.

For further particulars apply to:

MISS M. PEARL STIVER, GENERAL SECRETARY, CANADIAN NURSES' ASSOCIATION, STE. 401, 1411 CRESCENT ST., MONTREAL 25, QUEBEC.

Registered Nurses for General Duty in modern 182-bed hospital. Salary: $210 gross if registered in Saskatchewan; $5.00 increment every 6 mos. to maximum of $240. 1 mo. holiday after 1 yr. service or 2 wks. after 6 mos.; usual sick leave. Apply Sister Superior, Notre Dame Hospital, North Battleford, Sask.

General Duty Nurses for new 100-bed hospital. Basic salary: $170 plus maintenance. 3 wks. vacation. 8 statutory holidays. Rotating shifts. Apply, with full particulars, Supt., Lord Dufferin Hospital, Orangeville, Ont.

General Duty Nurses for 650-bed Teaching Hospital in Central California. Salary: $273-320 per mo. 40-hr. wk. Liberal vacation, holiday & sick leave plan. Apply Personnel Office, 510 E. Market St., Stockton, California.

General Supervisors, Charge Nurses & General Duty Nurses for new 150-bed hospital. Starting salary for General Duty Nurses — $220 for B.C. Registered, with annual increases up to $30. 40-hr. wk. 1½ days cumulative sick leave. 28 days vacation. 11 statutory holidays. Apply Supt. of Nurses, Trail-Tadanac Hospital, Trail, B.C.

Registered Nurses for Dept. of Veterans Affairs: Sunnybrook Hospital, Toronto & Westminster Hospital, London. Salaries per annum: Without experience, $2,430; 2 yrs. experience, $2,580; 3 or more yrs. experience, $2,730-3,120. Application forms, available at your nearest Civil Service Commission, National Employment Service or Post Office, should be forwarded immediately to Civil Service Commission of Canada, 1200 Bay St., Toronto 5, Ontario.

Registered Nurses for new 30-bed hospital. R.N.A.B.C. policies in effect. Apply Matron Creston Valley Hospital, Creston, B.C.

Graduate Nurses for Wayne County General Hospital & Infirmary at Eloise, Michigan, 16 miles west of downtown Detroit. Salary: $3,961-4,321 for 40-hr. wk.; $5,149-5,617 for 48-hr. wk. (which is optional). Choice of General or Psychiatric duty. All shifts available. Paid vacations & sick leave. Candidates must be graduates of accredited Canadian Nursing Schools. Visa required. Apply Wayne County Civil Service Commission, 2200 Cadillac Tower, Detroit 26, Michigan.

Do You Want a Change? Do You Want to See the Pacific Coast? Do You Like Nursing? Langley Prairie has a busy 50-bed General Hospital & will have several vacancies on the permanent nursing staff. Salary: $235. 44-hr. wk. Other personnel practices according to R.N.A.B.C. recommendations. If interested apply Miss M. R. Ward, Langley Memorial Hospital, Langley Prairie, B.C.

Supt. of Nurses & O.R. Supervisor for General Hospital, Dauphin, Man. 86-bed hospital with Nurses' Training School. Community of 6,500. Excellent living conditions. Supt. of Nurses must be good organizer & disciplinarian. Salary open for both positions. For further information apply A. J. Schmiedl, Sec.-Mgr.

Nursing Arts Instructor for School of Nursing. 150 students—450-bed hospital. Apply Director of Nursing, General Hospital, Saint John, N.B.

VANCOUVER GENERAL HOSPITAL

The Vancouver General Hospital requires:

General Staff Nurses. 40-hr. week. Salary of $231.00 as minimum and $268.50 as maximum, plus shift differential for evening and night duty.

Residence accommodation is available.

Applications should be accompanied by letter of acceptance of registration in B.C. from *Registrar of Nurses, 1101 Vancouver Block, Vancouver 2, B.C.*

Apply to: **Personnel Dept., General Hospital, Vancouver 9, B.C.**

WANTED
CLINICAL INSTRUCTOR FOR PEDIATRICS

for

War Memorial Children's Hospital

Capacity: 140-150 beds.

Post-graduate course preferred.

Good salary and Personnel Policies.

Apply:

Director of Nursing, Victoria Hospital, London, Ontario.

Instructor in Nursing Arts. Clinical Instructor in Medicine. Clinical Instructor in Surgery. For School of Nursing by Aug. 1. 177-bed hospital; affiliation arranged in Tuberculosis & Psychiatric Nursing. Maximum of 60 students. One class per yr. Complete maintenance available. Excellent personnel policies. For further particulars apply Miss E. A. Bietsch, Director of Nursing, General Hospital, Medicine Hat, Alberta.

Nursing Instructor. New 330-bed hospital opening in May. Excellent salary & personnel policies. For further information apply Director of Nursing, St. Thomas-Elgin General Hospital, St. Thomas, Ont.

Clinical Instructor (Nursing Arts). Modern 400-bed hospital. Student body — 100. Salary commensurate with position. Good personnel policies. Apply Director of Nursing, Kitchener-Waterloo Hospital, Kitchener, Ont.

Clinical Supervisors & Instructors: Surgical (2) & Medical (2). Also **General Staff Nurses.** Personnel policies based on R.N.A.O. recommendations. For full details apply Director of Nursing, General Hospital, Port Arthur, Ont.

Science Instructor for June or Sept. Complete maintenance in comfortable suite. 120-bed hospital — 35 students. New 150-bed hospital under construction. Apply, stating experience & salary expected, Director of Nurses, Jeffery Hale's Hospital, Quebec City, Quebec.

Senior Instructor to teach Nursing Arts & direct teaching program. Vacancy Aug. 1. Psychiatric Nursing experience preferred. Salary: $266-321 per mo. Also **Graduate Nurses** with Psychiatric training — Salary: $216-256 per mo.; without Psychiatric training — $211-251. 1,450-bed active treatment hospital conducting accredited school of training. 44-hr. wk. Residence with board, if desired: $30 per mo. Excellent holiday, sick leave & pension benefits. Apply, stating qualifications & experience, Supt. of Nurses, Provincial Mental Hospital, Ponoka, Alta.

HOSPITAL NURSES

GRADE 1 — $2,430-$2,820 GRADE 2 — $2,730-$3,120

Department of Veterans Affairs Hospitals

Camp Hill, Halifax	Deer Lodge, Winnipeg
Ste. Anne's, Montreal	Veterans Hospital, Saskatoon
Sunnybrook, Toronto	Colonel Belcher, Calgary
Westminster, London	Shaughnessy, Vancouver

Application forms, available at your nearest Civil Service Commission Office, National Employment Office or Post Office, should be filed with ***The Civil Service Commission, Ottawa.***

CIVIL SERVICE OF CANADA

Supervisor for 327-bed Tuberculosis Sanatorium **& General Duty Nurses for Surgical Unit handling Thoracic & Orthopedic Surgery.** For further information apply Director of Nursing, Fort William Sanatorium, Fort William, Ont.

Instructor in Science & Surgical Nursing for new school taking in one class yearly. Responsible for teaching Chemistry, & Anatomy & Physiology in 1st term & the Surgical portion of an integrated course in Medical-Surgical Nursing in 2nd term. Splendid opportunity to help develop new school being established on sound educational lines. For further information apply Director, School of Nursing, Metropolitan General Hospital, Windsor, Ont.

Instructors for: Science Teaching followed by Clinical Ward Teaching; Clinical Ward Teaching & lectures in Medical Nursing. Commencing salary: $250 (additional for experience). Current R.N.A.B.C. contract in effect. 65 students; one class per yr. For information about position & community apply Director of Nurses, Royal Inland Hospital, Kamloops, B.C.

Evening Supervisor & General Duty Nurses for General Hospital. 88 adult beds plus 30 bassinets. For particulars apply Director of Nursing, Norfolk General Hospital, Simcoe, Ont.

Public Health Nursing Supervisor & Public Health Nurses for generalized public health program. Attractive salary & working conditions. Blue Cross, Workmen's Compensation & other benefits. For information or application forms apply Mr. J. R. Coleman, Sec.-Treas., Simcoe County Board of Health, Court House, Barrie, Ont.

Public Health Nurse — Grade 1 — British Columbia Civil Service, Dept. of Health & Welfare. Starting salary: $255-260-266 per mo. depending on experience, rising to $298. Promotional opportunities available. Candidate must be eligible for registration in B.C. & have completed University degree or Certificate course in Public Health Nursing. (Successful candidates may be required to serve in any part of province.) Cars are provided. 5-day wk. in most districts. Uniform allowance. Candidates must be British subjects under 40, except in case of ex-service women who are given preference. Further information may be obtained from Director, Public Health Nursing, Dept. of Health & Welfare, Parliament Bldgs., Victoria, B.C. Application forms obtainable from all Govt. agencies, Civil Service Commission, Weiler Bldg., Victoria, or 411 Dunsmuir St., Vancouver 3, to be completed & returned to the Chairman, Victoria, B.C.

Public Health Nurse for city of Peterborough. Basic salary: $2,700 per yr. (inexperienced). Annual increment, $150. Transportation allowance or vehicle provided. 5-day wk. Pension plan. Annual vacation: 1 mo. with additional time at Christmas & Easter. Apply Dr. J. P. Wells, Medical Officer of Health, City Hall, Peterborough, Ont.

Public Health Nurses for generalized program in rural-suburban Health Unit near Toronto. Starting salary: $3,000 for qualified nurses; annual increments to $3,400. Pension plan. Car allowance. For full details apply Supervisor, Peel County Health Unit, Court House, Brampton, Ont.

GENERAL STAFF NURSES

GENERAL WARDS **OPERATING ROOM** **OBSTETRICS**

for

200-bed hospital

Pleasant city of 33,000. Two colleges.
Good salary and personnel policy.

For further information apply to:

DIRECTOR OF NURSES, GENERAL HOSPITAL, GUELPH, ONTARIO.

Public Health Nurses for generalized program — City of Ottawa Health Dept. Salary: $2,460 - 3,222 plus Cost of Living Bonus (approx. $240 per yr.). Good personnel policies. Superannuation & Blue Cross benefits. Apply Sec., Board of Health, Transportation Bldg., 48 Rideau St., Ottawa 2, Ont.

Public Health Nurse for Health Unit for generalized program. Proximity to Toronto permits urban living conditions to be combined with rural-urban work. Excellent transportation arrangements, group insurance & other attractive working conditions. Apply Dr. R. M. King, York County Health Unit, Newmarket, Ont.

Public Health Nurse for generalized program in official agency, both rural & urban, in attractive & developing county. 37½-hr., 5-day wk. Car allowance. 1 mo. vacation. Group insurance. Apply Dr. Archie F. Bull, Medical Officer & Director, Halton County Health Unit, Milton, Ont.

Nurse Technician Team (intravenous & intramuscular therapy). Apply Dr. H. Featherston, Asst. Supt., Civic Hospital, Ottawa, Ontario.

Dietitian (qualified) for Teaching Hospital. Opportunity for advancement. Full maintenance. Fare from Canada for accepted candidate. For full particulars, write, giving qualifications & date available, Matron, King Edward VII Memorial Hospital, Bermuda.

General Duty, Operating Room & Maternity Nurses. Salary: $182.50 for recent graduates. 1 meal, laundry. 8-hr. day, 44-hr. wk. — straight shift. $20 differential evenings — $15 nights. Vacation, sick time, statutory holidays on salary. Semi-annual & annual increments. Financial recognition for yrs. of experience, post-graduate or university study. Apply Director of Nursing, General Hospital, Winnipeg, Man.

General Duty Nurses for Medical & Surgical Wards. Personnel policies based on R.N.A.O. recommendations. $50 towards transportation refunded after 1 yr. service. Apply Director of Nursing, General Hospital, Port Arthur, Ont.

General Duty Nurses for Medical, Surgical, Pediatrics, Obstetrics. Good salary & personnel policies. Apply Director of Nursing, Victoria Hospital, London, Ont.

General Duty Nurses — "You will like it here." Placement in the service of your choice in Teaching Hospital. Beginning salary: $240 per mo. for 40-hr. wk. Scheduled increases, payment for overtime, 6-hr. evening duty. $270 per mo. for night duty. Sick leave, 6 holidays, 3 wks. vacation. Residence facilities if desired. Tuition-free courses after 6 mos. service. Opportunities for advancement. Apply Director of Nursing Service, University Hospitals of Cleveland, Cleveland 6, Ohio.

General Duty Nurses for Permanent Staff & Summer Relief. Well equipped small hospital. 8-hr. duty; 5½-day wk.; rotating shifts. Long weekend following night duty. Popular summer resort. Apply Supt., Saugeen Memorial Hospital, Southampton, Ont.

CENTRAL SUPPLY ROOM SUPERVISOR

for

Victoria Hospital, London, Ontario

Applications requested for this position in 700-bed active hospital.

The Central Supply Room is to be transferred to new area with modern equipment, in the new wing, to be opened in September.

Good Salary and Personnel Policies.

Apply

Director of Nursing, Victoria Hospital, London, Ontario.

General Duty Staff Nurses for 515-bed General Hospital. 40-hr. wk. Beginning salary: $260 per mo. with advancement to $285; $20 additional for evenings & nights. Hospital & School of Nursing fully approved. Apply Director of Nursing, The Grace Hospital, 4160 John R. St., Detroit 1, Michigan.

General Duty Nurses for 450-bed General Hospital. Beginning salary: $220 per mo. with annual increments — ranging to $255. Recognition for proof of experience. 40-hr. wk. — rotating shift. 28 days holidays plus 10 statutory holidays per yr. & allowance for sick time. Temporary accommodation can be supplied. Applicants must be eligible for registration in B.C. Apply Director of Nursing, Royal Jubilee Hospital, Victoria, British Columbia.

General Duty Nurses for 920-bed General Hospital. Starting salary: $190-210 per mo. plus meals & laundry. Credit for past experience, annual increments. 44-hr. wk., rotating shifts. Statutory holidays, 21 days vacation, cumulative sick leave, hospitalization subsidized, pension plan. For further information apply Supt. of Nursing Service, University of Alberta Hospital, Edmonton, Alta.

General Duty Nurses (2) immediately for 12-bed hospital. 8-hr. shift. Gross salary: $240 per mo. with maintenance available at minimal cost. Apply Hôpital Notre-Dame, Val Marie, Saskatchewan.

General Duty Nurses for United Church of Canada hospital, 300 miles north of Vancouver on B.C. coast. Salary: $215 per mo. less $40 for board, room & laundry of uniforms. 2 annual increments of $5.00 per mo. Cumulative sick time — 1½ days per mo. 1 mo. annual holiday plus 10 days in lieu of statutory holidays. Transportation refunded after 1 yr. Apply Matron, R.W. Large Memorial Hospital, Campbell Island P.O., Bella Bella, B.C.

General Duty Nurses for 430-bed hospital. Salary: $230-260. Credit for past experience. Annual increments. 40-hr. wk. Statutory holidays; 28 days annual vacation. Cumulative sick leave. Apply Director of Nursing, Royal Columbian Hospital, New Westminster, British Columbia.

General Duty Nurses for 65-bed hospital. Salary: $150 per mo. plus full maintenance. 44-hr. wk. 4 wks. vacation. Summer resort on Lake Huron. Apply Supt., Alexandra Marine & General Hospital, Goderich, Ont.

General Duty Nurses. Salary: $182.43 (one hundred eighty-two dollars & forty-three cents) monthly, paid on a bi-weekly basis; 26 pays in a yr. Salaries have scheduled rate of increase. 48-hr. wk. 8-hr. broken day; 3-11, 11-7, rotation. Cumulative sick leave. Pension Plan in force. Blue Cross. 3 wks. vacation after 1 yr. service. Apply Supt. of Nurses, Muskoka Hospital, Gravenhurst, Ont.

General Duty Nurses. Gross salary: $200 per mo. with 1 yr. or more of experience; $190 per mo. with less than 1 yr. experience; $20 per mo. bonus for evening or night duty. Annual increment, $10 per mo. 44-hr. wk. 8 statutory holidays. 21 days vacation & 14 days sick leave with pay after 1 yr. employment. Apply Director of Nursing, General Hospital, Oshawa, Ont.

WOODSTOCK GENERAL HOSPITAL
WOODSTOCK, ONTARIO

Operating Room Nurse (General Duty)

Apply, stating qualifications, to:

DIRECTOR OF NURSES, GENERAL HOSPITAL,
WOODSTOCK, ONTARIO.

General Duty & Maternity Nurses for attractive new 100-bed hospital in Southern Ontario. Salary & increments in accordance with R.N.A.O. 3 wks. annual vacation. Sick leave benefits. Residence rooms available. Apply, giving full details of training, experience, P.G., age, date available, etc., Director of Nurses, District Memorial Hospital, Tillsonburg, Ont.

General Staff Nurses for 400-bed Medical & Surgical Sanatorium, fully approved. Student affiliation & post-graduate program. Full maintenance. Recreational facilities. Vacation with pay. Sick benefits after 1 yr. Blue Cross coverage. Attractive salary. For further particulars apply Supt. of Nurses, Nova Scotia Sanatorium, Kentville, N.S.

General Duty Nurses for Obstetrical, Surgical & Pediatric Wards. 375-bed hospital with Training School. Residence accommodation if desired. Progressive city on main line to Toronto & Montreal. Apply Director of Nursing, General Hospital, Brantford, Ont.

General Duty Registered Nurses for large city hospital. Vacancies in Medical, Surgical & Pediatric Wards. Salary: $50-56 per wk. 44-hr. wk. Vacation, 3 wks. Illness allowance, 18 days per yr. after 1 yr. service. Apply Director of Nursing, General Hospital, Hamilton, Ont.

Registered Nurses for General Duty (2). 70-bed fully modern hospital on C.P.R. main line & Trans-Canada Highway to Calgary & Banff. Salary: $165 & full maintenance with $5.00 increment every 6 mos. Sick leave with pay. 1 mo. annual vacation with pay plus statutory holidays. 8-hr. day, 44-hr. wk. Apply Supt., Municipal Hospital, Brooks, Alta.

Registered & Graduate Nurses for General Duty for 100-bed hospital. Apply, giving experience, references, etc., Supt., The Cottage Hospital, Pembroke, Ont.

Registered Nurses: General Duty, Obstetrical (Night), P. M. Nursery (experienced). 94-bed hospital on nursing contract. Apply Miss Olive G. Dennison, Lake Region Hospital, Fergus Falls, Minnesota.

Registered Nurses for General Duty for small General Hospital. Additional staff required to institute 44-hr. wk. Salary: $150 per mo. with full maintenance. 8-hr. duty; rotating shifts. 3 increments of $5.00 per mo. at 6-mo. intervals. Blue Cross. 10 days sick leave per yr. 6 statutory holidays. 28 days vacation. $30 bonus for working during July, Aug. & Sept. Apply Supt., Barrie Memorial Hospital, Ormstown, Que.

Registered Nurses for General Duty in 600-bed hospital for Tuberculosis. Initial gross salary: $185 per mo. 8-hr. duty, 44-hr. wk. Board & room available. Apply Director of Nursing, Beck Memorial Sanatorium. London. Ont.

Central Alberta Sanatorium, Calgary, Alta., offers to **Graduate Nurses** a 6-mo. post-graduate course in Tuberculosis. Maintenance & salary as for General Staff Nurses. Opportunity for permanent employment if desired. Spring & Fall Classes. Further information on request.

DIRECTOR OF NURSES
for
McKELLAR GENERAL HOSPITAL, FORT WILLIAM, ONT.

For *June 1.* New, modern 435-bed hospital with affiliated School of Nurse Education. This position calls for a Director with experience and preferably University and Post-Graduate training. Well staffed and equipped. Excellent living quarters. Salary open.

Apply Mr. R. V. Johnston, Superintendent

Graduate Nurses (3) at once owing to present nursing staff leaving to get married. 30-bed hospital on C.P.R. main line & Trans-Canada Highway, 2 hrs. from Calgary. Modern nurses' residence & garage. 8-hr. day, 6-day wk. with rotating shifts. Starting salary: $170. $5.00 increase at end of each 6 mos. 3 wks. holiday & statutory holidays. Sick leave with pay & free hospitalization. Apply Matron, Municipal Hospital, Bassano, Alberta.

Graduate Nurses for General Duty. Living-in accommodation if desired. Apply Supt. of Nurses, Homewood Sanitarium, Guelph, Ont.

Graduate Nurses for completely modern West Coast hospital. Salary: $230 per mo. less $40 for board, residence, laundry. $10 annual increments. Special bonus of $10 per mo. for night duty. 1 mo. vacation with full salary after 1 yr. service. 1½ days sick leave per mo. cumulative to 36 days. Transportation allowance not exceeding $60 refunded after 1st yr. Apply, stating experience, Miss E. L. Clement, Supt. of Nurses, General Hospital, Prince Rupert, B.C.

If you are coming to Britain to nurse, you will be welcome at 324-bed Sully Hospital, Sully, Glamorgan, South Wales. Modern hospital on the sea. Experience available in Medical & Surgical Nursing of all Chest Diseases in adults & children. Post-graduate course for British Tuberculosis Ass'n Certificate & instruction by medical staff & tutor. Comfortable, modern nurses' home with recreational facilities. For further information write H. M. Foreman, M.B.E., M.B., Physician Supt.

If you are coming to Britain to nurse, you will be welcome at 240-bed Glan Ely Hospital (Pulmonary & Non-Pulmonary), Fairwater, Cardiff, South Wales. **Female Staff Nurses (S.R.N.)** — excellent experience available in bone & joint surgery & thoracic surgery. British Tuberculosis Ass'n Certificate may be obtained after 12 mos. service. **Female Student Nurses** for B.T.A. Cert. **Pupil Asst. Nurses** for Training School inaugurated with two local hospitals. All posts resident or non-resident. For further particulars write Matron.

Science Instructor (1) & Nursing Arts Instructor (1) for Sept. School with approx. 90-100 students. Apply Director of Nurses, Victoria Public Hospital, Fredericton, N.B.

Graduate Nurse (Evening Supervisor: 3-11 p.m.). 70-bed General Hospital, 25 miles from New York City. Beginning salary: $260 per mo. plus maintenance. Good personnel practices. Apply Administrator, Tarrytown Hospital, Tarrytown-on-Hudson, New York.

Graduate Nurse (qualified) to conduct Certified Nursing Assistant Course & Staff Education in 100-bed hospital. Apply, stating qualifications & experience, Director of Nursing, Norfolk General Hospital, Simcoe, Ont.

Registered Nurses (2) immediately for 14-bed General Hospital. Salary: $220 per mo. less $35 for full maintenance. 40-hr. wk. pending. 28 days vacation per yr. & statutory holidays. Excellent experience offered young graduates. Picturesque town in beautiful Canadian Rockies on C.P.R. main line. Attractive community social life — badminton club, tennis, golf, theatre. Fare refunded after 1 yr. service. Apply Matron, Golden Hospital, Golden, B.C.

VICTORIAN ORDER OF NURSES FOR CANADA

has Staff and Supervisory positions in various parts of Canada.

Personnel Practices Provide:

- Opportunity for promotion.
- Transportation while on duty.
- Vacation with pay.
- Retirement annuity benefits.

For further information write to:

Director in Chief,
Victorian Order of Nurses for Canada,
193 Sparks Street, Ottawa 4, Ont.

Nurses (2) for 20-bed hospital. Modern nurses' residence. Salary: $190 per mo. plus full maintenance. Usual holidays with pay, sick leave, etc. Apply Matron, Union Hospital, Vanguard, Sask.

Day Supervisor (1); Registered Nurses (4) at once for 34-bed new General Hospital. Apply Supt., Ajax & Pickering General Hospital, Ajax, Ont.

Director of Nursing for 140-bed new hospital. Spacious apt. provided & top salary paid according to qualifications. Also **Operating Room Supervisor with P.G.** & **Dietitian** to take charge of ultra modern kitchen, all stainless steel. Apply Supt., Plummer Memorial Public Hospital, Sault Ste. Marie, Ont.

Director of Nurses for 38-bed hospital. Nursing staff of 10 & 4 practising doctors. Suite in nurses' home. Situated on Hope-Princeton highway. Excellent bus & train service to Vancouver. Apply, stating salary expected, Administrator, General Hospital, Princeton, British Columbia.

Public Health Nurses for Dept. of Health, City of Kingston. Salary range in effect. Transportation provided. 5-day wk. Pension & hospitalization plans available. Apply Medical Officer of Health, City Hall, Kingston, Ont.

Graduate Staff Nurses (2) for General Hospital. Salary: $220 per mo. less $45 for board & residence. $120 annual increment. 44-hr. wk. Fare returned after 6 mos. service. $6.00 per mo. travelling allowance. For further particulars apply Med. Supt., Skidegate Inlet General Hospital, Queen Charlotte City, B.C.

Supt. of Nurses & General Duty Nurse (1). Salaries: Supt. — Open; Gen. Duty — $170-190 plus full maintenance; also half M.H.S.A. & M.M.S. New 56-bed hospital with separate residence — private suite for Supt. Apply Mrs. L. W. Borthwick, Sec.-Treas., District General Hospital, Morden, Man.

Registered Nurse with Public Health course for position of **Health Nurse** with opportunity to teach related courses. Apply Director of Nurses, Holy Cross Hospital, Calgary, Alberta.

General Duty Staff Nurses for 175-bed hospital, located 20 miles from Detroit. Excellent personnel policies with opportunities for advancement. Apply Director of Nursing, St. Joseph Hospital, Mount Clemens, Michigan.

Registered Nurses (2) for General Duty for 40-bed hospital. Starting salary: $175 plus full maintenance. $5.00 increase each 6 mos.; $5.00 per wk. extra for night duty. 44-hr. wk. Statutory holidays. 3 wks. vacation with full pay after 1 yr. service. Apply Matron, Municipal Hospital, Box 560, Taber, Alta.

Public Health Nurses for Nursing Staff of Elgin-St. Thomas Health Unit. Salary: $2,400-3,000 with allowance for experience. Annual increase, $100. 5-day wk. 3 wks. vacation; cumulative sick leave up to 90 days. Pension plan, hospital & medical plan. Car allowance, $780 & interest-free loan, if necessary, to assist in purchase of car. Apply Supervisor of Nursing, City Hall, St. Thomas, Ont.

WANTED

for

GENERAL HOSPITAL, GUELPH, ONTARIO

INSTRUCTORS

(qualified)

NURSING ARTS (1) and CLINICAL (1) by *August 1.*

200-bed hospital — 65 students. One class per year enters in September. Allowance made for degree with experience.

For further information apply:
DIRECTOR OF NURSES

Supt. of Nurses for modern 60-bed General Hospital. Apply, stating qualifications, Dr. M. R. Stalker, Honorary Medical Supt., Barrie Memorial Hospital, Ormstown, Que.

General Duty Nurses for active 50-bed General Hospital — in attractive community, 100 miles northwest of Toronto. Salary plus maintenance. Excellent living conditions. Apply Supt., Memorial Hospital, Listowel, Ont.

Registered Nurse for General Duty for 8-bed hospital immediately. Salary, holidays & sick leave according to M.A.R.N. Must be able to speak both French & English — preferably R.C. Those interested apply Sr. Marie Jean, Superior, Notre-Dame de Lourdes, Manitoba.

Graduate Nurse for Infirmary of Residential School for Boys. Yearly salary. Live in residence — private bed-sitting room & bath. Summer holidays: 2½ mos.; Christmas: 3 wks.; Easter: 10 days. School opens Sept. 13. Applicants between 30 & 40 given first consideration. Apply Headmaster, Appleby College, Oakville, Ont.

Clinical Instructors: Medical Nursing (1); Surgical Nursing (1) for School of Nursing. For further details apply Director of Nursing, Civic Hospital, Ottawa, Ont.

Instructors for School of Nursing. Apply, stating qualifications, Supt. of Nursing, General Hospital, Toronto, Ontario.

General Duty Nurses for Medical, Surgical & Obstetrical Depts. 40-bed hospital. Salaries: $190 per mo.; maximum $210. Room & board deducted, $30 per mo. $5.00 increase every 6 mos. Rotating shifts. 2 wks. vacation. 7 statutory holidays. Uniforms laundered. Blue Cross plan. Apply Supt., General Hospital, Espanola, Ont.

Certified Nursing Assts. Salary: $110 per mo.; maximum $130. Room & board deducted, $30 per mo. $5.00 increase every 6 mos. Rotating shifts. 2 wks. vacation. 7 statutory holidays. Uniforms laundered. Blue Cross Plan. Apply Supt., General Hospital, Espanola, Ontario.

Graduate Nurses (3) for 24-bed hospital. Salary: $230 per mo. if B.C. registered; less $40 board, lodging, laundry. 1 mo. vacation after 1 yr. on full pay. 1½ days sick leave per mo. cumulative. Apply, stating experience, Matron, Terrace & District Hospital Terrace, British Columbia.

Registered Nurses (2) for General Duty. 40-bed Municipal Hospital. Starting salary: $180 per mo. plus full maintenance to maximum $220 according to nursing experience. $5.00 per wk. extra for night duty. 44-hr. wk. 3 wks. holiday with full pay after 1 yr. service. Statutory holidays. Modern nurses' home on grounds. Apply Sec., Municipal Hospital, Box 560, Taber, Alta.

Asst. Supt. with X-Ray experience or willing to learn X-Ray technique preferred. Apply Dr. W. A. Oakes, Public Hospital, Clinton, Ont.

Official Directory

Provincial Associations of Registered Nurses

ALBERTA

Alberta Association of Registered Nurses

Pres., Miss H. Penhale, University of Alta., Edmonton; Past Pres., Miss F. Ferguson; Vice-Pres., Misses E. Bietsch, K. Morton; *Councillor*, Sr. M. Laramee, Gen. Hosp., Edmonton; *Committee Chairmen: Institutional Nursing*, Miss J. Morrison, Govt. House, Edmonton; *Private Duty*, Mrs. T. McLeod, 10738-123rd St., Edmonton; *Public Health*, Mrs. M. Larson, 315-10th St. S., Lethbridge; *Educational Policy*, Miss G. M. Hall, Gen. Hosp., Calgary; **Registrar, Mrs. Clara Van Dusen, Ste. 5, 10129-102nd St., Edmonton.**

Ponoka District 2

Pres., Miss Jean Grahn; Vice-Pres., Mrs. L. C. Baisley; Sec.-Treas., Miss Marian Sundberg, Provincial Hosp., Ponoka; *Rep.* to *The Cdn. Nurse*, Mrs. Muriel Thumlert.

Calgary District 3

Pres., Miss J. Shaw; Vice-Pres.; Miss A. Fallis; Sec., Miss L. Bibby, 2614-7th Ave. N. W.; Treas., Mrs. E. Jones; *Rep.* to *The Cdn. Nurse*, Sr. S. Mageau, Holy Cross Hospital.

Medicine Hat District 4

Pres., Mrs. R. McKay; Vice-Pres., Mrs. A. Renner, Miss J. L. Mogen; Sec., Miss F. Ireland, 861-1st St.; Treas., Miss J. MacKay; *Social Service Convener*, Miss L. Greene.

Red Deer District 6

Pres., Mrs. P. Gerke; Vice-Pres., Mrs. A. Johnson; Sec., Mrs. W. Landon; Corr. Sec., Mrs. R. Dous, 3713-43rd Ave.; Treas., Miss N. MacKenzie, Municipal Hosp.

Edmonton District 7

Chairman, Miss E. Taylor; Vice-Chairmen, Mrs. J. Hanna, Miss R. Ball; Sec., Sr. M. Laramee, Gen. Hosp.; Treas., Miss I. Chaffin; *Program Com.*, Miss B. Lea; *Reps.* to: *Local Council of Women*, Miss M. Fraser; *Council of Community Services*, Misses I. Johnson, R. McClure; *The Cdn. Nurse*, Miss D. Watson.

Lethbridge District 8

Pres., Sr. Beatrice; Vice-Pres., Miss E. Edlund, Mrs. F. Stafford; Sec., Miss B. Hoyt, 1261-6th Ave. A.S.; Treas., Miss M. Shimbashi, Galt Hosp.; *Com. Convs.: Program & Social*, Mrs. Z. Oswald; *Rep.* to: *Press & The Cdn. Nurse*, Mrs. M. Bradley.

BRITISH COLUMBIA

Registered Nurses' Association of British Columbia

Pres., Miss A. Creasor; Vice-Pres., Miss E. Rossiter, Sr. Anne of the Sacred Heart; Hon. Sec., Miss H. King; Hon. Treas., Miss H. Mussallem; *Committee Chairmen: Public Health Nursing*, Miss R. Morrison; *Institutional Nursing*, Miss C. Sinclair; *Private Duty Nursing*, Mrs. B. Lane; Dir., Personnel Services, Miss Evelyn E. Hood, 1101 Vancouver Block, Van.; Exec. Sec. & Registrar, Miss Alice L. Wright, 2524 Cypress St., Vancouver 9.

New Westminster Chapter

Pres., Miss B. Smith; Vice-Pres., Mrs. E. Hutchison; Rec. Sec., Miss P. Wright; Corr. Sec., Miss B. Carter, 443 E. Columbia St.; Treas., Mrs. V. Neilson.

Vancouver Island District

Pres., Mrs. V. Tams; Vice-Pres., Mrs. J. Field; Sec.-Treas., Mrs. M. Canlan, Courtenay; *Councillors*, Mmes Tams, R. Bosward, Miss D. Priestley; *Chap. Pres.: Alberni*, Mrs. M. Spencer; *Cowichan*, Mrs. W. MacPherson; *Ladysmith*, Mrs. A. Quayle; *Nanaimo*, Mrs. J. Best; *Victoria*, Miss J. Harris; *Plateau*, Mrs. R. Canlan; *Rep.* to *The Cdn. Nurse*, Mrs. B. Bennett.

Victoria Chapter

Past Pres., Miss J. Harris; Pres., Miss E. Riddell; Vice-Pres., Misses D. Munro, M. Matcham; Rec. Sec., Miss M. Coutts; Corr. Sec., Miss M. Church, 1259 Oliver St.; Treas., Mrs. R. Bosward, 1752 Adanac St.; *Com. Conveners: Program*, Mrs. D. Jefferson; *Public Health*, Mrs. McKinnon; *Social*, Mrs. Jones; *Red Cross & Civil Defence*, Miss A. Neilson; *Membership*, Miss M. Woolliams; *Community Welfare*, Miss S. Campbell; *Institutional Nursing*, Miss O. Wilson; *Office Nursing*, Mrs. M. Conyers; *Private Nursing*, Miss M. Milburn; *Councillor*, Mrs. Bosward; *Reps.* to: *Local Council of Women*, Mrs. E. Butler; *Press*, Mrs. Myers; *The Cdn. Nurse*, Mrs. J. Woodhead.

East Kootenay District
Fernie Chapter

Pres., Mrs. M. Haile; Vice-Pres., Miss E. Jordan; Sec. and *Press Rep.*, Mrs. M. Arbuckle; Treas., and *Canadian Nurse Rep.*, Miss Myra E. Young, Box 1060, Fernie; *Committees: Visiting*, Mmes L. Hogan, Citra; *Entertainment*, Misses M. Saunders, D. Vosburgh, Mrs. M. East.

Kamloops-Okanagan District

Pres., Mrs. P. Trueman; Vice-pres., Misses J. Sutcliffe, Rowles; Sec.-Treas., Miss H. Empey, 2260 Speer St., Kelowna; *Councillors*, Mrs. G. Breckenridge, Miss J. Russell; *Officers: Public Relations*, Mrs. Pearson; *Liaison*, Miss A. Beattie.

Kamloops-Tranquille Chapter

Pres., Miss M. Davies; Vice-Pres., Mrs. A. Ellis, Miss E. Stewart; Rec. Sec., Mrs. E. Olson; Corr. Sec., Miss D. Rositch, 24 Thrupp St., North Kamloops; Treas., Mrs. E. Nicholson; *Committees: Public Health*, Mrs. N. McFarland; *Program*, Miss I. Jardine; *Rep.* to *Press*, Mrs. L. Wilcox.

Greater Vancouver District

Pres., Miss Hazel Hull; Vice-Pres., Misses R. Cunningham, H. Levenick, N. Armstrong; Sec., Miss Mary G. Wade, 1591 W. 16th Ave.; Treas., Miss Helen Tompkins, 1379 W. 15th Ave.; *Councillors*, Misses Hull, H. King, A. Cummings.

Vancouver Chapter

Pres., Miss H. M. King; Vice-Pres., Misses M. Duncan, E. Williamson; Rec. Sec., Sr. Denise Marguerite; Corr. Sec., Miss M. Small, 1056 Matthews Ave.; Treas., Miss F. Fleming, 3036 W. 14th Ave.; *Committee Conveners: Private Nursing*, Mrs. D. Angrove; *Institutional*, Miss P. Hockridge; *Public Health*, Miss R. Greig.

MANITOBA

Manitoba Association of Registered Nurses

Pres., Miss E. M. Watts, 580 Spruce St., Winnipeg; Vice-Pres., Misses M. K. Ruane, M. E. Wilson; *Members at Large*, Mrs. M. Harney, Misses S. Tretiak, M. Fryers; Executive Secretary & Registrar, Miss L. E. Pettigrew, 247 Balmoral St., Winnipeg.

NEW BRUNSWICK

New Brunswick Association of Registered Nurses

Pres., Miss M. E. Hunter, 369 Charlotte St., Fredericton; Past Pres., Miss H. M. Bartsch; Vice-Pres., Miss G. Stevens; Sr. M. Rosarie; Hon. Sec., Mother Bujold; *Committee Chairmen: Private Nursing*, Mrs. D. Fisher, Box 199, Woodstock; *Public Health*, Miss A. Robichaud, Box 55, Newcastle; *Institutional Nursing*, Miss B. M. Selfridge, Gen. Hosp., Saint John; *Legislation*, Miss Lois Smith, 65 Regent St., Fredericton; *Educational Policy*, Miss K. MacLaggan, 385 Union St., Fredericton; *Health Insurance*, Mrs. M. MacL. Scott, 121 Main St., Nashwaaksis; *Adv. to Schools of Nursing*, Miss M. Myers, T.B. Hosp., East Saint John; *Employment Policies*, Miss S. Miles, D.V.A. Hosp., West Saint John; *The Cdn. Nurse*, Miss R. McKenzie, 136 Cameron St., Moncton; *Councillors*, Mrs. V. G. Craig, Misses H. J. Lynds, M. J. Stephenson: Executive Secretary, Miss Alma F. Law, P.O. Box 846, Fredericton.

NOVA SCOTIA

Registered Nurses' Association of Nova Scotia

Pres., Miss Jean Forbes, 504 Roy Bldg. Halifax; Past Pres., Miss K. Harvey; Vice-Pres., Mrs. D. McKeown, Sr. C. Gerard, Miss R. Myers; Rec. Sec., Miss J. Elliott; School of Nursing Adviser, Miss R. F. MacDonald; *Committee Chairmen: Public Health*, Miss M. MacLellan; *Institutional Nursing*, Sr. Jean Eudes; *Private Nursing*, Mrs. M. MacDonald; *Legislative*, Sr. M. Estelle; *Educational Policy*, Miss J. Church; *Public Relations*, Miss E. A. E. MacLennan; *Nominating*, Miss D. Gill; *Discipline*, Miss M. Haliburton; Adv. to Registrar, Miss E. Purdy; Sec.-Registrar, Miss Nancy H. Watson, 301 Barrington St., Halifax.

ONTARIO

Registered Nurses' Association of Ontario

Pres., Miss B. M. Beyer, Runnymede Hosp., Toronto; Vice-Pres., Misses A. Reid, M. C. Livingston; *Interest Committee Chairmen: Institutional Nursing*, Miss M. G. Russell; *Private Nursing*, Miss S. M. Holmes; *Public Health Nursing*, Miss M. M. MacLachlan; *District Chairmen: Dist. 1*, Mrs. H. Griffiths, 727 Confederation St., Sarnia. *2*, Miss M. Snider, Gen. Hosp., Stratford. *3*, Miss C. Adams, Kitchener-Waterloo Hosp., Kitchener. *4*, Miss E. W. Ewart, Mountain Sanatorium, Hamilton. *5*, Miss W. Hendrikz, 80 Woodycrest Ave., Toronto 6. *6*, Miss M. Peart, Gen. Hosp., Belleville. *7*, Sr. A. Mantle, Hôtel-Dieu, Kingston. *8*, Miss M. Nephew, Gen. Hosp., Cornwall. *9*, Miss E. L. McKenney, St. Joseph's Hosp., North Bay. *10*, Sr. Patricia, St. Joseph's Hosp., Port Arthur. *11*, Mrs. D. Pudden, Box 598, Gravenhurst. *12*, Miss K. King, Kirkland & District Hosp., Kirkland Lake. **General Sec.-Treas., Miss Florence H. Walker, 515 Jarvis St., Toronto 5.**

District 1

Chairman, Mrs. H. Griffiths; Past Chairman, Miss E. Horton; Vice-Chairmen, Major M. Crolly, Miss L. McCaughey; Sec.-Treas., Mrs. M. Smith, 754 Kemsley Dr., Sarnia; *Chap. Chairmen: Elgin Co.*, Miss I. Poole; *Kent*, Mrs. A. Berry; *Windsor-Essex*, Mrs. M. Quinn; *Standing Com. Convs.: Finance*, Miss McCaughey; *Membership*, Miss L. Bell; *Nominations*, Miss J. Tillett; *Program*, Major Crolly; *Interest Com. Convs.: Industrial Nursing*, Mrs. A. Longeway; *Institutional*, Miss D. Colquhoun; *Private Nursing*, Mrs. D. Page; *Public Health*, Miss C. Murray; *Councillors: London*, Miss M. Smith; *Sarnia*, Mrs. Y. Swindells; *Strathroy*, Miss W. Hughes; *Rep.* to *The Cdn. Nurse*, Miss P. Gray.

District 2

Chairman, Miss M. Snider; Vice-Chairmen, Misses M. Holland, H. Naudett; Sec.-Treas., Miss M. Haviland, 278 Light St., Woodstock; *Com. Reps.: Institutional Nursing*, Miss B. Clark; *Private Nursing*, Mrs. V. Byrick; *Public Health Nursing*, Miss N. Cunningham; *Industrial Nursing*, Miss T. Dawson; *Councillors: Brant Co.*, Miss N. Neff; *Huron*, Miss M. Love; *Norfolk*, Miss R. Misner; *Oxford*, Miss Hicks; *Perth*, Miss M. Brydon.

District 3

Chairman, Miss C. M. Adams; Vice-Chairmen, Misses L. Campbell, B. Law; Sec.-Treas., Miss E. Janzen, 164 Erb St. W., Waterloo; *Com. Chairmen: Institutional Nursing*, Sr. Ursula; *Public Health*, Miss L. Richardson; *Industrial Nursing*, Miss H. Peterson; *Membership*, Miss A. Patterson; *Nominating*, Miss G. Hill; *Finance*, Miss R. Gaw; *Bursary*, Miss R. Mulligan; *Councillors: Dufferin*, Mrs. J. Phillips; *Grey*, Miss I. Weirs; *Waterloo*, Sr. Celestine; *Wellington*, Miss M. Thompson.

District 4

Chairman, Miss E. Ewart; Vice-Chairmen, Misses D. Sharpe, M. Campbell; Sec-Treas., Miss E. Ferguson, Mt. Hamilton Hosp., Hamilton; Asst. Sec.-Treas., Miss J. Tufford; *Com. Convs.: Private Nursing*, Miss E. McQuinn; *Public Health*, Miss H. MacKay; *Institutional Nursing*, Miss B. Grinham; *Industrial Nursing*, Miss M. Bruce.

District 5

Chairman, Miss M. J. Wilson; Past Chairman, Miss W. Hendrikz; Vice-Chairmen, Miss R. M. Watson, Mrs. R. Couse; Sec.-Treas., Mrs. M. Chisholm, 121 Castlefield Ave., Toronto 12; *Councillors*, Misses E. Davidson, A. Pennell, J. Secor, A. Shiach; *Chap. Chairmen:* Miss J. Hefferman, Mrs. V. McPherson; *Com. Convs.: Membership*, Mrs. G. Purcell; *Finance*, Miss M. McElheran; *Program*, Miss R. Watson; *Nomination*, Miss E. Grindley; *Private Nursing*, Miss Secor; *Public Health Nursing*, Miss Davidson; *Education*, Miss E. Bregg; *Cdn. Nurse Circ.*, Miss R. Jackson; *Bursary*, Miss J. Ives; *Publicity*, Miss H. MacLennan.

District 6

Chairman, Miss M. Millard; Vice-Chairmen, Misses R. Cunningham, S. M. Waters; Sec.-Treas., Miss L. Sine, 143 Ann St., Belleville; *Committee Conveners: Membership*, Miss V. Nelson; *Finance*, Miss M. Peart; *Nominating*, To be appointed; *Industrial Nursing*, Miss M. Greer; *Public Health*, Miss V. Clark; *Institutional Nursing*, Miss M. Mills; *Private Nursing*, Mrs. S. Prentice; *Chap. Chairmen: A*, Miss H. Collier; *B*, Miss G. Lehigh; *C*, Miss F. Vickers.

District 7

Chairman, Miss J. Godard; Vice-Chairman, Miss R. Carberry; Sec.-Treas., Miss B. Baker, Ongwanada Sanatorium, Kingston; *Committee Conveners: Private Nursing*, Mrs. F. Paul; *Public Health*, Miss E. Earle; *Institutional*, Miss L. Acton; *Membership*, Miss A. Davis; *Rep.* to *The Cdn. Nurse*, Miss M. Fairfield.

District 8

Chairman, Miss E. Horsey; Past Chairman, Miss M. Nephew; Vice-Chairmen, Misses V. Adair, E. Feasby; Sec., Miss R. MacIsaac, 286 Nelson St., Ottawa 2; Treas., Miss F. Fournier; *Chap. Chairmen: Cornwall*, Sr. M. Mooney; *Pembroke*, Miss E. Sheppard; *Ottawa* area, Miss A. Macleod.

District 9

Chairman, Miss E. McKenny; Vice-Chairmen, Miss I. Penman, Sr. M. Melanie; Sec., Miss M. Shannon, St. Joseph's Hosp., North Bay; Treas., Mrs. B. Whidden, 730 Fraser St., Sudbury.

District 10

Chairman, Miss K. Feisel; Past Chairman, Sr. Patricia; Vice-Chairmen, Misses M. Pringle, K. Escott; Sec.-Treas., Miss M. O'Rourke, 366 Wiley St., Port Arthur; *Chap. Chairmen: Dryden*, Mrs. B. Stewart; *Sioux Lookout*, Miss B. L. Rorke; *Committees: Program*, Sr. Patricia, Misses Pringle, E. Cook; *Finance*, Misses C. Connolly, M. Curran; *Institutional Nursing*, Miss N. Clayton; *Private Nursing*, Miss M. Flanagan; *Public Health*, Miss D. Adams; *Industrial Nursing*, Mrs. H. Roy; *Membership*, Sr. Eileen; *Bursary*, Miss Connolly; *Councillors*, Misses D. Shaw, H. Wilson, Mmes J. Corbin, A. Perlotte; *Rep.* to *The Cdn. Nurse*, Miss R. Petrone.

District 11

Chairman, Mrs. D. Pudden; Vice-Chairmen, Misses E. Hurd, E. Pittuck; Sec., Mrs. Cordelia Willmott, Beaumaris, Muskoka Lake; Treas., Miss Mary McIsaac, 74 Penetang St., Orillia.

District 12

Chairman, Miss Katharine King; Vice-Chairmen, Mrs. W. Avery, Miss M. Coutts; Sec., Mrs. Shirley Robson, Box 91, Haileybury; Treas., Miss Muriel Rice, Box 377, Haileybury.

PRINCE EDWARD ISLAND

The Association of Nurses of Prince Edward Island

Pres., Miss Verna Darrach, 62 Prince St., Charlottetown; Vice-Pres., Sr. M. Irene, Charlottetown Hosp.; Miss R. Ross, 57 Orlebar St., Charlottetown; Hon. Treas., Mrs. M. Bradshaw, Prince County Hosp., Summerside; Hon. Sec., Miss H. Adams, Prince County Hosp., Summerside; *Committee Conveners: Educational Policy,* Mrs. H. Bolger, Charlottetown Hosp.; *Private Nursing,* Mrs. D. Corrigan, 228 Grafton St., Charlottetown; *Public Health,* Miss A. Trainor, 188 Prince St., Charlottetown; *Institutional Nursing,* Mrs. L. MacDonald, P.E.I. Hosp., Charlottetown; **Sec.-Registrar, Miss Muriel Archibald, Riley Bldg., 188 Prince St., Charlottetown.**

QUEBEC

The Association of Nurses of the Province of Quebec

The Association of Nurses of the Province of Quebec, created by Licensing Act, April 17, 1946, replacing The Registered Nurses Association of the Province of Quebec Incorporated February 14, 1920.

Pres., Mlle Eve M. Merleau, 3201 ave Forest Hill, Montréal 26; Vice-Pres. *(Eng.),* Miss H. Lamont, Sr. M. Felicitas; *(Fr.),* Sr. Marie-Paul, Mlle A. Mailloux; Hon. Sec., Sr. Jeanne Forest; Hon. Treas., Miss E. Geiger; *Councillors,* Mlles R. Aubin *(Dist. 3),* I. Frédette *(Dist. 4),* S. Pilon *(Dist. 6),* M. Gauthier *(Dist. 8),* F. Verret *(Dist. 9).* The above constitute the *Executive Council* and are *Members of the Committee of Management,* together with: Mlles C. Samson, R. Dussault, G. Lamarre, M. Jalbert, L. Couet, G. Badeaux, G. Côté, Misses M. Ferguson, M. Holder, A. Christie, Sr. Ste-Sophie Barat. *Advisory Committee,* Misses R. Chittick, C. Aitkenhead, E. C. Flanagan, C. V. Barrett, Mrs. J. Green, Mlles A. Martineau, J. Gagnon, Mme J. Morency, Srs. Valérie de la Sagesse, St-Ferdinand. *Committee Chairmen: Institutional Nursing (Eng.),* Miss J. Anderson, The Montreal General Hosp.; *(Fr.),* Mlle J. Ouimet, Hôp. Notre-Dame, Mtl. 24; *Public Health (Eng.),* Miss P. Forbes, Children's Service Centre, 1869 Dorchester St. W., Mtl. 25; *(Fr.),* Mlle J. Lacasse, Mtl. Health Dept., 671 Ogilvy St., Mtl. 15; *Private Nursing (Eng.),* Miss M. Gormley, 4216 Dorchester St. W., Mtl. 6; *(Fr.),* Mlle B. Chalifour, 1163 rue Ploermel, Québec. *Chairmen, Board of Examiners: (Eng.),* Miss A. Haggart, Royal Victoria Hosp., Mtl. 2; *(Fr.),* Mlle J. Trudel, Hôp. Ste-Justine, Mtl. 10. **Sec.-Registrar, Miss A. Winonah Lindsay. Visitor to French Schools of Nursing, Mlle Suzanne Giroux.** ***Association Headquarters, 1538 Sherbrooke St. W., Montreal 25.***

District 1

Chairman, Mlle C. Julien, Mont-Joli; Sec., Rév. Sr. Laurette de la Ste-Face, Sanatorium St-Georges, Mont-Joli.

District 2

Chairman, Mlle C. Samson, Hôtel-Dieu, Lévis; Sec., Mlle G. Gosselin, 499 rue St-Joseph, Lévis.

District 3

English Chapter: Chairman, Miss C. Aitkenhead, Sherbrooke Hosp.; Sec., Miss J. Shanks, Sherbrooke Hosp. *French* Chapter: Chairman, Mlle R. Aubin, East Angus, Cté Compton; Sec., Sr. St-André, Hôp. Général St-Vincent de Paul, Sherbrooke.

District 4

Chairman, Mlle I. Fredette, Unité Sanitaire, Acton Vale; Sec., Mlle M. Blais, Hôp. St-Charles, St-Hyacinthe.

District 5

Chairman, Mlle R. Dussault, 221 rue St-Michel, St-Jean; Sec., Mlle T. Guilbert, 196 rue Labrèche, St-Jean.

District 6

Noranda Chapter: Chairman, Mme J. Morency, Hôtel Albert, Rouyn; Sec., Mlle A. Duhaime, Unité Sanitaire, Rouyn. *Hull* Chapter; Chairman, Mlle S. Pilon, 89 rue Maisonneuve, Hull; Sec., Sr. Lucien de Jésus, Hôp. du Sacré-Coeur, Hull.

District 7

Chairman, Mlle A. Mailloux, 24 rue St-Louis, St-Jérôme; Sec., Mlle E. Gauthier, Unité Sanitaire, L'Epiphanie.

District 8

Chairman, Mlle M. Gauthier, 1810 rue Lajoie, Trois-Rivières; Sec., Mlle R. Beauclair, 650 rue Des Volontaires, Trois-Rivières.

District 9

French Chapter: Chairman, Mlle F. Verret, 53 rue Ste-Ursule, Québec; Sec., Mlle M. Jalbert, 752 rue de La Canardière, Québec. *English* Chapter: Chairman, Mrs. Jessie Green, Jeffery Hale's Hosp., Quebec; Sec., Miss M. Dawson, Jeffery Hale's Hosp., Quebec.

District 10

Chairman, Mlle L. Couet, 162 rue Rivière de Moulin, Chicoutimi; Sec., Mlle A. Aubry, Hôtel-Dieu St-Vallier, Chicoutimi.

District 11

French Chapter: Chairman, Mlle G. Badeaux, 198 boul. Ste-Croix, Ville St-Laurent; Sec., Mlle M. Olivier, 4298 rue Adam, Montréal 4. *English* Chapter: Chairman, Rev. Sr. M. Felicitas, St. Mary's Hosp., Montreal 26; Sec., Miss K. Brady, 4610 Kensington Ave., Montreal 28.

SASKATCHEWAN

Saskatchewan Registered Nurses' Association (Incorporated 1917)

Pres., Miss Grace Motta, Gen. Hosp., Moose Jaw; Vice-Pres., Miss M. Earnshaw, Health Region Office, Prov. Health Bldg., Regina; Miss L. Miner, Health Region Office, Prince Albert; *Councillor,* Miss G. James, Medical Bldg., University of Sask., Saskatoon; *Committee Chairmen: Institutional Nursing,* Miss M. Mackenzie, St. Paul's Hosp., Saskatoon; *Public Health Nursing,* Mrs. H. Fletcher, 632 Oxford St. W., Moose Jaw; *Private Nursing,* Miss E. Robinson, Ste. 6 Grenfell Apts., Regina; Asst. Registrar, Mrs. E. Donnelly; **Exec.-Sec., Registrar, Miss Lola Wilson, 401 Northern Crown Bldg., Regina.**

Alumnae Associations

ALBERTA

Calgary General Hospital

Past Pres., Mrs. T. Yearwood; Pres., Miss M. Podwysocki; Vice-Pres., Mmes J. Turner, D. J. Munn, L. Edwards, R. Cunniffe; Rec. Sec., Mrs. D. G. McInnes; Corr. Sec. Mrs. R. Dippner, 1029-17th Ave. E.; Treas. & *Membership,* Mrs. W. T. Brigden, Ste. 2, 2537-4th Ave. N.W.; *Committees: Program,* Mrs. B. Katz; *Ways & Means,* Mrs. R. T. B. Garland; *Visiting;* Mrs. C. W. Boyd; *Refreshment,* Mrs. C. B. White; *Banquet,* Mrs. J. R. Milne; *Extra Members,* Miss P. Bock, Mmes C. F. Parks, D. F. Thompson; *Rep.* to *Press,* Miss D. Wolfe.

Holy Cross Hospital, Calgary

Pres., Miss M. Sparrow; Vice-Pres., Misses E. McLean, J. Cummins; Rec. Sec., Mrs. J. C. McCuaig; Corr. Sec., Mrs. E. A. Sullivan, 2804-26th St. S.W.; Treas., Mrs. B. A. Elleker; *Committees: Entertainment,* Mmes A. Benner, K. G. Calvert; *Refreshments,* Miss A. Griffiths, Mrs. W. Castleman; *Visiting,* Mrs. R. Jackson; *Membership,* Mmes J. D. Willocks, T. E. Jacques, K. E. Baker, D. D. Batdorf; *Editors,* Mmes A. D. McAlpine, J. L. Barlass.

Edmonton General Hospital

Hon. Pres., Srs. Superior, Laramee; Past Pres., Mrs. R. Watson; Pres., Miss V. Protti; Vice-Pres., Mmes P. Rentier, H. Williamson; Rec. Sec., Mrs. C. Hergott; Corr. Sec., Mrs. J. Healy, 7619-119th St.; Treas., Miss V. Chrenek, 8515-122nd Ave.; *Committees: Standing,* Mmes J. Johnson (*conv.*), J. Hope, J. Loney, J. Lauerman, C. Atkins, I. Wagner; *Scholarship Fund,* Sr. M. Laramee; *Publicity Sec.,* Miss L. Grolla.

Misericordia Hospital, Edmonton

Hon. Pres., Sr. Ste. Alban; Hon. Vice-Pres., Sr. Ste. Rudolph; Pres., Miss H. Willetts; Vice-Pres., Miss C. McLean, Mrs. G. Stewart; Sec., Miss A. Ostashek, 9922-111th St.; Treas., Mrs. M. Craig; *Committees: Social,* Mrs. V. Lewis, Misses V. Woytovich, M. Motiuk; *Phoning,* Miss J. Flaska, Mmes G. Suter, D. Ripley; *Paper,* Mrs. R. Heaney, Misses J. Clark, D. Wild, G. Lundquist; *Rep.* to *Press,* Mrs. A. Dyck.

Royal Alexandra Hospital, Edmonton

Hon. Pres., Miss I. Johnson; Pres., Mrs. A. Boutillier; Vice-Pres., Misses V. Chapman, I. Hamilton; Rec. Sec., Mrs. H. Carson; Corr. Sec., Mrs. S. Stewart, 9732-87th Ave.; Treas., Miss M. Cawsey, 11035-87th Ave.; *Councillors,* Misses M. Fraser, I. Johnson, Mrs. I. MacKay; *Rep.* to *United Nations,* Mrs. Oliver.

School of Nursing
University of Alberta, Edmonton

Pres., Mrs. J. Day; Past Pres., Miss S. Anhill; Vice-Pres., Mrs. B. McLuhan; Sec., Mrs. D. Hallberg; Corr. Sec., Mrs. C. Macklam, 11242-57th St.; Treas., Miss J. Henderson, 10937-90th Ave.; *Social Convs.,* Misses M. Beamish, K. Cryderman.

Archer Memorial Hospital, Lamont

Pres., Mrs. A. Strong; Vice-Pres., Mrs. W. Motycka, Miss Joan Graham; Sec.-Treas., Mrs. B. I. Love, Elk Island National Park, Lamont.

Medicine Hat General Hospital

Pres., Mrs. E. Campbell; Vice-Pres., Mmes G. Crockford, Richards; Sec., Mrs. D. May, M.H.G.H.; Treas., Mrs. J. Rombough; *Historian,* Miss F. Ireland; *Exec.,* Mmes F. Dederer, G. Graham, S. Patton, Misses L. Pudwell, Chester.

Vegreville General Hospital

Hon. Pres., Sr. J. Boisseau; Hon. Vice-Pres., Sr. C. Clements; Pres., Mrs. K. Stuporach; Vice-Pres., Mrs. K. Dougan; Sec.-Treas., Mrs. H. Landry.

BRITISH COLUMBIA

St. Paul's Hospital, Vancouver

Hon. Pres., Sr. Superior M. Celina; Hon. Vice-Pres., Sr. D. Marguerite; Pres., Miss E. Black; Vice-Pres., Mmes T. Gray, T. W. Collishaw; Sec., Mrs. A. Barnes; Corr. Sec., Miss G. Warkentin, 2098 York St.; Treas. Mrs. H. L. Banner, Ste. 24, 1075 Gilford St.; Asst. Treas., Mrs. C. Reaveley; *Committee Chairmen: Finance,* Mrs. W. Dawe; *Bursary Loan,* Miss C. Harkness; *Sick Benefit, Benevolent & Emergency Loan,* Miss E. Gilmour; *Social,* Miss P. Stalder; *Program,* Miss S. Ingalls; *Publicity,* Miss M. Freeze; *Visiting,* Mrs. C. McDonald; *Sports,* Misses R. Cunningham, L. Jaccard; *Alumnae Bulletin Editor,* Miss C. Connon, 1987 W. 35th Ave.; *Rep.* to *The Canadian Nurse,* Miss A. Belecky.

Vancouver General Hospital

Hon. Pres., Miss H. King; Past Pres., Miss M. Campbell; Pres., Mrs. R. Campbell; Vice-Pres., Mmes D. Routledge, C. Crocker, Miss A. Wakefield; Exec. Member, Mrs. M. Saunders; Exec. Sec., Mrs. M. Faulkner, 587 W. 18th Ave.; *Com. Conveners: Education,* Mrs. E. Smith; *Membership,* Miss L. Hurst; *Program,* Miss F. Chestnut; *Publicity,* Miss H. Rogers.

Royal Jubilee Hospital, Victoria

Pres., Mrs. M. Conyers; Vice-Pres., Mmes E. Hayman, D. Pite; Sec., Mrs. P. Turgoose, 667 St. Patrick St.; Asst. Sec., Mrs. D. MacLoud; Treas., Mrs. N. McConnell, 2406 Central Ave.; *Com. Convs.: Social,* Mrs. L. Aldred; *Visiting,* Mrs. B. Gow; *Membership,* Mrs. C. Sutton; *Phone,* Miss M. Matcham; *Entertainment,* Miss R. Wilson; *Rep.* to *Press,* Miss D. Munro.

St. Joseph's Hospital, Victoria

Hon. Pres., Sr. Rose Mary; Hon. Vice-Pres., Sr. M. Gregory; Pres., Mrs. I. Moore; Vice-Pres., Mmes J. D. Maltman, D. Jones; Rec. Sec., Mrs. H. Woodhead; Corr. Sec., Mrs. G. Rose; Treas., Mrs. H. R. Carey, 2131 Fair St.; *Committees: Membership,* Mrs. Maltman; *Program,* Mrs. E. Daniher; *Vital Statistics,* Miss H. Cruikshank; *Refreshments,* Mrs. R. Staples; *Resolutions,* Mmes E. Corbet, J. Reed, R. Ditchburn; *Councillors,* Mmes Ditchburn, Playfair, Ingle, J. Grant; *Rep.* to *Press,* Mrs. G. Field.

MANITOBA

St. Boniface Hospital

Hon. Pres., Sr. D. Clermont; Pres., Miss M. Gibson; Vice-Pres., Mmes R. McNaughton, E. Dwyer; Rec. Sec., Mrs. H. Lemoine; Corr. Sec., Mrs. M. Mahaffy, 162 St. Anthony Ave., West Kildonan; Treas., Miss B. Deshaye, 133 Masson St., St. Boniface; *Committees: Visiting,* Miss L. Dick; *Social & Program,* Miss S. Lawson; *Advisory,* Misses T. Greville, B. Smith, L. Deconnick, Grice; *Membership,* Miss F. Buhr; *Legislative,* Mrs. F. Dumas; *Archivist,* Mrs. P. Wlock; *News Ed., Estote Fidelis,* Miss K. McCallum; *Press & Publicity,* Miss M. Gabrielle; *Scholarship,* Miss C. Bourgeault; *Reps.* to: *Local Council of Women,* Mrs. D. Curran; *The Cdn. Nurse,* Miss P. Hannon.

Children's Hospital, Winnipeg

Pres., Mrs. W. J. McCord; Vice-Pres., Mrs. W. Boyd; Rec. Sec., Miss K. Kidd; Corr. Sec., Miss P. Scorer, 307 Atlantic Ave.; Treas., Mrs. H. K. Davis, 668 Spruce St.; *Committees: Program,* Miss G. Linney; *Membership,* Mmes R. Tavener, N. Brown; *Visiting,* Mrs. D. King; *Refreshments,* Mrs. I. Moore; *Reps.* to: *Local Council of Women,* Miss J. Boyd; *Hosp. Board,* Mrs. McCord.

Grace Hospital, Winnipeg

Pres., Miss Betty Harvey; Vice-Pres., Mrs. M. Davis; Sec.-Treas., Miss A. Bennett, 261 Furby St.; *Committees: Membership,* Mmes D. Stephenson, L. Bloomer, J. Moffatt; *Entertainment,* Misses B. Coulthard, I. Laurie, Mmes H. McLeod, V. Symons.

Misericordia Hospital, Winnipeg

Hon. Pres., Miss G. Thompson; Pres., Miss M. Dyck, 70 Kingsway; Vice-Pres., Mrs. E. McLaren; Rec. Sec., Mrs. J. McTavish; Corr. Sec., Mrs. P. Ireland; Treas., Mrs. P. Buerket; *Committees: Social,* Mmes R. Smith, D. Cutts; *Membership,* Miss E. Bannatyne; *Lunch,* Mrs. M. Cruden; *Reps.* to: *Blue Cross,* Miss S. Boyne; *The Canadian Nurse,* Miss M. LaCroix; "*Hi-Lites,*" Mmes H. Copeland, I. Stewart, Miss K. Law.

Winnipeg General Hospital

Hon. Pres., Mrs. J. Morrison; Pres., Mrs. J. E. Wilson; Vice-Pres., Mmes T. H. Williams, G. H. Palmer, Miss W. Stevenson; Rec. Sec., Mrs. G. Kent; Corr. Sec., Miss L. Lethbridge, 877 Grosvenor Ave.; Treas., Mrs. Sturgeon; *Committees: Program,* Mrs. W. H. Anderson; *Membership,* Mrs. J. F. Duff; *Visiting,* Miss I. Johnson; *Journal,* Mmes C. G. Kershaw, A. E. Reynolds, Miss C. Cosgrove; *Scholarship Fund,* Miss S. Tretiak; *Archivist,* Mrs. R. E. Emmett; *Reps.* to *School of Nursing,* Mrs. J. D. McQueen; *Drs. & Nurses Directory,* Miss A. Billinkoff; *Welfare Council,* Miss J. Kerr; *Council of Women,* Mrs. E. Grist; *The Cdn. Nurse,* Miss I. Alkman.

NEW BRUNSWICK

Victoria Public Hospital, Fredericton

Pres., Mrs. A. Russell; Vice-Pres., Mmes M. McMaster, H. Simms, E. Kelly; Sec.-Treas., Mrs. M. Smith, P.O. Box 481, Fredericton; Asst. Sec.-Treas., Miss K. MacFarlane; *Publicity Conv.,* Mrs. M. Scott; *Add. Exec.,* Misses M. Barry, M. Jewett, Mmes T. Donovan, B. Sherwood

Saint John General Hospital

Hon. Pres., Mrs. J. Vaughan; Pres., Miss M. Moore; Vice-Pres., Mmes R. A. Corbett, R. Nason; Sec., Mrs. G. Somerville, 112 Queen St.; Asst. Sec., Miss A. Schofield; Treas., Mrs. S. Rankin, 84 Duke St.; Asst. Treas., Mrs. W. McKinnon; *Com. Convs.: Program,* Miss W. Hooser; *Refreshments,* Mrs. M. O'Neal; *Visiting,* Miss P. Harrity; *Auditor,* Mrs. R. Dunlop; *Add. Exec. Members,* Miss L. Floyd, Mrs. E. T. K. Mooney.

NOVA SCOTIA

Nova Scotia Hospital, Dartmouth

Pres., Mrs. C. O'Neil; Vice-Pres., Mrs. P. Dean; Sec., Mrs. M. Keddy, 23 Harbour Drive; Treas., Miss M MacDougall; *Board of Directors,* Mmes M. Whelly, S. Spindler, R. MacArthur.

Halifax Infirmary

Pres., Miss L. A. Grady; Vice-Pres., Mrs. C. Campbell; Rec. Sec., Mrs. W. J. Slattery; Corr. Sec., Mrs. A. Miller; Treas., Miss C. MacDonald, Marlboro Woods, Halifax; *Committee Chairmen, Ways & Means,* Mrs. D. Robitaille; *Program,* Sr. T. Joseph; *Visiting,* Mrs. L. Robertson; *Rep.* to *Press,* Mrs. G. Bulley.

Victoria General Hospital, Halifax

Pres., Mrs. H. S. T. Williams; Vice-Pres., Misses S. Nott, G. Flick; Sec. Miss Joan Candle; Treas., Mrs. L. Bell; *Program Conv.,* Miss E. Haliburton; *Board of Directors,* Mmes T. Carpenter, W. Hunt, J. Cameron.

Aberdeen Hospital, New Glasgow

Pres., Mrs. Lloyd Buell, Trenton, N.S.; Sec., Mrs. Frank Barker, Plymouth, N.S.; Treas., Miss Jessie McLaughlin, Aberdeen Hosp.

City Hospital, Sydney

Hon. Pres., Miss A. Martin; Pres., Mrs. Hilda Wall; Sec., Miss L. Bagnell; Treas., Miss M. O'Connor, C.H.; *Committee Conveners: Publicity,* Mrs. C. Hillcoat; *Flower,* Miss C. MacNeil; *Rep.* to *The Cdn. Nurse,* Miss L. Munro.

ONTARIO

Belleville General Hospital

Hon. Pres., Miss M. L. Peart, Mrs. G. Rutherford; Pres., Mrs. D. Howie; Vice-Pres., Mmes D. Taylor, B. McCreary, J. Holway; Sec., Mrs. Irene Burns; Treas., Mrs. E. Portt.

Brantford General Hospital

Hon. Pres., Miss J. M. Wilson; Pres., Miss Mary Terryberry; Vice-Pres., Mrs. V. Cheyne; Sec., Miss Jean Spicer, B.G.H.; Treas., Miss M. Gillen, B.G.H.; *Rep.* to *Press & The Cdn. Nurse,* Mrs. H. Crawford, 23 Trimdon Ave.

Brockville General Hospital

Hon. Pres., Miss Shannette, Mrs. White; Pres., Mrs. H. W. Greene; Vice-Pres., Miss R. Carbery, Mrs. M. Derry; Sec., Mrs. R. Reynolds; Treas., Mrs. W. Stewart; *Committees: Membership,* Miss V. Preston; *Visiting & Gift,* Miss Kendrick; *Social,* Mrs. J. Reynolds; *Property,* Mrs. H. Bishop; *Rep.* to *Press,* Miss Carbery, 156 Pine St.

Ontario Hospital, Brockville

Hon. Pres., Mrs. E. M. Orr; Pres., Mrs. M. E. Warner; Vice-Pres., Mmes M. Reilly, H. Workman; Sec., Miss M. Snider; Treas., Mrs. J. Cameron, 66 Chaffey St.; *Rep.* to *Press,* Mrs. A. Dodds.

Public General Hospital, Chatham

Hon. Pres., Miss P. Campbell; Pres., Mrs. Ruth Judd; Vice-Pres., Mrs. R. Brown, Miss M. Cochrane; Rec. Sec., Miss M. Case, 91½ Delaware Ave.; Corr. Sec., Mrs. K. Brisley; Asst. Corr. Sec., Miss B. Stenton; Treas., Mrs. M. Case; *Historian,* Miss L. Hastings; *Councillors,* Misses V. Dyer, Tinney, M. McNaughton, D. Thomas.

St. Joseph's Hospital, Chatham

Hon. Pres., Sr. Consolata; Hon. Vice-Pres., Sr. Eunice; Pres., Mrs. H. Colby; Vice-Pres., Mrs. D. O'Neil, Miss D. Marini; Rec. Sec., Miss R. Ouellette; Corr. Sec., Miss S. Grant, 380 Victoria Ave.; Treas., Miss B. Bradley; *Committees: Program,* Mrs. P. Stacey, Miss H. Costello; *Lunch,* Miss A. Stacey, Mrs. S. Marshall; *Buying,* Mrs. S. Hawley, Miss E. Stokes; *Councillors,* Mmes L. Smyth, I. Mulhern, M. Mulhern, Miss M. Doyle; *Reps.* to: *Press,* Mrs. S. Goodbrand; *The Cdn. Nurse,* Mrs. M. Jackson.

Cornwall General Hospital

Hon. Members, Mrs. Baldick, Miss M. Nephew; Pres., Mrs. F. Cameron; Vice-Pres., Mmes E. Coons, V. Fenton; Sec., Mrs. P. Rutley; Treas., Miss E. Connors; *Committee Conveners: Membership,* Mrs. J. Kilgour; *Flowers & Gift,* Miss E. Allen; *Social & Program,* Mrs. M. McGowan; *Reps.* to *Press,* Miss C. Smith; *The Cdn. Nurse,* Mrs. M. McAteer, C.G.H.

Hotel Dieu Hospital, Cornwall

Hon. Pres., Sr. St. George; Pres., Mrs. M. Payment; Vice-Pres., Mrs. H. McGregor; Sec.-Treas., Sr. Windle, H.D.H.; *Committee Conveners: Membership,* Mrs. A. Renaud; *Social,* Sr. St. Margaret Mary.

McKellar Hospital, Fort William

Hon. Pres., Miss S. Davidson; Pres., Mrs. F. Stanfield, 231 S. Brodie St.; Vice-Pres., Mrs. L. Seed; Sec., Mrs. G. MacLeod; Corr. Sec., Mrs. J. Tackaberry, Cheriville Terrace; Treas., Mrs. J. Gill; *Council,* Misses W. Ballantyne, I. Otway, E. Knickerbocker, Mmes M. Gillman, L. McDonald, A. Salini.

Galt Hospital

Hon. Pres., Miss G. Hill; Pres., Miss B. Leslie; Vice-Pres., Miss J. Bryce; Sec., Miss R. Moyer; Asst. Sec., Miss B. McRae; Treas., Mrs. W. Bell, 24 Park Ave.; *Committees: Program,* Miss Dredge, Mrs. J. Kersh; *Social,* Misses F. Clark, F. Cole; *Gifts,* Miss H. Blagden; *Phone,* Miss J. Gilchrist; *Rep.* to *Press,* Miss L. Maddock.

Guelph General Hospital

Hon. Pres., Miss M. R. Gaw; Past Pres., Miss L. Campbell; Pres., Mrs. C. Gausden; Vice-Pres., Misses M. Featherstone, B. Ingles; Sec., Miss F. Widdows; Corr. Sec., Mrs. G. M. Elliott, 50 Stuart St., Treas., Miss C. Ziegler, 48 Delhi St.; *Committees: Social,* Mmes T. R. Pickard, K. Dolson; *Program,* Miss N. Heaney, Mrs. L. Wolfenburg; *Cards,* Miss E. Stewart; *Wedding Gifts,* Misses E. Lusau, H. Standing; *Phone,* Miss M. McFee; *Reps.* to: *Blue Cross,* Miss E. Mortimer; *Press & The Cdn. Nurse,* Mrs. Elliott.

St. Joseph's Hospital, Guelph

Hon. Pres., Sr. M. St. Paul; Hon. Vice-Pres., Sr. M. Alphonsine; Pres., Mrs. L. Kelso; Vice-Pres., Miss D. Pfoff, Mrs. M. Saunders; Sec., Mrs. C. Kelly, 275 Metcalfe St. N.; Treas., Mrs. E. Dales, Rockwood; *Com. Conveners: Entertainment,* Mrs. P. Straby; *Visiting & Flowers,* Miss M. Hanlon; *Rep.* to *Blue Cross,* Mrs. M. Gordon.

Hamilton General Hospital

Hon. Pres., Miss M. Hudson; Pres., Miss A. Thomson; Vice-Pres., Misses M. Morgan, J. Hurst; Rec. Sec., Mrs. I. Yuskiw; Corr. Sec., Mrs. F. Duxbury, 262 Cope St.; Treas., Mrs. C. Massie, 83 Jackson St. W.; *Treas., Mutual Benefit Ass'n.,* Miss O. Watson; *Com. Convs.: Social,* Miss A. Welstead; *Flower,* Mrs. E. Kroch; *Membership,* Miss R. Moore; *Dr. W. F. Langrill Educ. Fund,* Miss M. Watson.

Ontario Hospital, Hamilton

Hon. Pres. Miss K. E. Turney; Pres., Miss M. A. Seeman; Vice-Pres., Miss D. Simony; Sec., Mrs. J. Aspinal, 28 Cliff Ave.; Treas., Miss E. Orr; *Committees: Social,* Mrs. A. Smith, Miss L. Angle; *Visiting,* Mrs. M. Sutherland; *Rep.* to *Press,* Mrs. J. Schoan.

St. Joseph's Hospital, Hamilton

Hon. Pres., Sr. M. Geraldine; Past Pres., Mrs. M. Marrin; Pres., Miss M. Donovan; Vice-Pres., Mrs. P. Mancini; Rec. Sec., Miss M. Scharbach; Corr. Sec., Miss D. Battersby, 1253 Cannon St. E.; Treas., Mrs. D. Cumming, 1253 Main E., Apt. 3; *Reps.* to: *R.N.A.O.,* Mrs. E. Marcaccio; *The Cdn. Nurse,* Miss S. Quance.

Kingston General Hospital

Pres., Miss S. Finlay; Vice-Pres., Miss M. MacInnis, Mrs. N. Tordoff; Sec., Miss D. McLaren, K.G.H.; Treas., Miss R. Atkins, K.G.H.; *Com. Convs.: Private Nursing,* Miss O. Cummings; *Flower & Gift,* Mrs. S. Smith; *Social,* Miss V. Johnston; *Film Council,* Mrs. S. Campbell; *Reps.* to: *Local Council of Women,* Mrs. E. Henry; *Press & The Cdn. Nurse,* Miss P. Ohlke.

Kitchener-Waterloo Hospital, Kitchener

Pres., Mrs. R. Hodd; Vice-Pres., Mrs. H. Schmalz; Sec., Mrs. F. Snyder; Corr. Sec., Mrs. C. Pequegnat; Treas., Mrs. R. Ruppel, 217 Glasgow St.; Asst. Treas., Miss R. Frim.

St. Mary's Hospital, Kitchener

Hon. Pres., Sr. M. Augustine; Hon. Vice-Pres., Sr. M. Paulo; Pres., Miss L. Schummer; Vice-Pres., Mrs. K. Colombo; Rec. Sec., Miss A. Fritz; Corr. Sec., Miss E. Weber; Treas., Miss H. Stumpf; *Councillors,* Mmes B. Powlowski, M. Cullen, G. Race, N. Schmidt; *Rep.* to *R.N.A.O. & The Cdn. Nurse,* Mrs. M. Weber, 269 Frederick St.

Ontario Hospital, London

Pres., Mrs. M. Daiken; Vice-Pres., Mmes H. Bruner, M. Maloney; Sec., Mrs. E. McKinlay, Nurses' Res., Westminster Hosp.; Treas., Mrs. W. Soutar; Asst. Sec.-Treas., Mrs. J. Gilpin; *Committee Conveners: Flower,* Mrs. E. Grosvenor; *Social,* Mrs. H. Hilgert; *Rep.* to *Press,* Mrs. A. V. Reilly.

St. Joseph's Hospital, London

Hon. Pres., Sr. M. Fabian; Hon. Vice-Pres., Sr. M. Loyola; Pres., Mrs. F. Wallace; Vice-Pres., Mmes M. Woods, A. Prendergast; Rec. Sec., Miss M. MacPherson; Corr. Sec., Mrs. F. Maylor, 242 Piccadilly St.; Treas., Miss P. O'Dwyer, 558 St. George St.; *Social Conv.,* Miss A. Loughlin; *Reps.* to: *Press,* Mrs. M. Harding; *The Cdn. Nurse,* Miss S. Gignac.

Victoria Hospital, London

Hon. Pres., Miss H. Stuart; Hon. Vice-Pres., Miss R. Thompson; Pres., Mrs. H. Kennedy; Vice-Pres., Miss L. Cummings, Mrs. D. Gerrard; Rec. Sec., Mrs. M. Crispin; Corr. Sec., Mrs. M. Shearer, 4 Rogers Ave.; Treas., Mrs. N. Thomson, 51 Irwin St.; *Board of Directors,* Mmes E. Logan, A. Robinson, C. McBride, E. Humphries, Misses D. Atkinson, M. Kennedy; *News Bulletin,* Mrs. A. McCulloch, Misses G. Erskine, C. Gillies.

Oshawa General Hospital

Hon. Pres., Miss M. Bourne; Pres., Mrs. B. Murphy; Vice-Pres., Miss V. Diederickson, Mrs. B. Mason; Sec., Miss E. Sheremeta, O.G.H.; Corr. Sec., Miss S. Porter; Asst. Corr. Sec., Miss E. Leask; Treas., Miss J. Hunter, 304 Leslie St.; Asst. Treas., Miss E. Wray; *Committees: Program,* Mmes J. Simmons, E. Bowman; *Social,* Mmes R. Nesbitt, E. Henry; *Flower,* Miss M. Brown; *Ed., Bulletin,* Mrs. L. Dean; *Rep.* to *The Cdn. Nurse,* Mrs. J. Jeffrey, 300 Golf St.

Lady Stanley Institute (Incorporated 1918) Ottawa

Hon. Pres., Mrs. W. L. Lyman; Hon. Vice-Pres., Misses M. Stewart, E. Young; Pres., Mrs. G. O. Skuce; Sec., Mrs. R. B. Bryce, 147 Primrose Ave.; Treas., Miss M. E. Scott, 53 Arthur St.; *Flower Conv.,* Miss D. Booth; *Directors,* Mmes M. E. Jones, R. L. Gisborne, Steele, Miss Pridmore; *Reps.* to: *Local Council of Women,* Mmes Aust, Fraser, Jones, Ellard; *The Cdn. Nurse,* Miss E. Johnston, 15 Barrie Ave.

Ottawa Civic Hospital

Hon. Pres., Miss E. Young; Pres., Miss D. Ainger; Past Pres., Miss V. Adair; Vice-Pres., Miss J. Milligan, Mrs. A. Gray; Rec. Sec., Mrs. W. Lafleur; Corr. Sec., Mrs. W. E. Davidson, 18 Arlington Ave.; Treas., Mrs. A. Thomson, 39 Geneva St.; *Committee Conveners: "Spokes Speak"* Miss M. Lamb; *Flower,* Mrs. A. Meldrum; *Councillors,* Misses V. Moffatt, J. Magladry, W. Gemmell, Mmes H. Weld, E. True, A. Meldrum.

Ottawa General Hospital

Hon. Pres., Sr. Marie-Idella; Hon. Vice-Pres., Sr. Honorine; Pres., Mrs. D. B. Kipp; Vice-Pres., Misses M. T. Belliveau, D. McVeigh; Sec., Miss C. Petitclerc; Treas., Miss J. Stock, 390 Chapel St.; *Councillors,* Sr. Madeleine of Jesus, Mmes H. Racine, H. Sims, Misses G. Boland, P. Coderre, R. Powell; *Com. Conveners: Membership,* Miss J. Frappier; *Program,* Miss M. Prindiville; *Reps.* to: *C.W.L.,* Mrs. McEvoy; *Blue Cross,* Mrs. N. Chassé; *Central Nursing Registry,* Misses A. Saunders, M. Butler.

St. Luke's Hospital, Ottawa

Hon. Pres., Miss E. Maxwell, O.B.E.; Pres., Mrs. G. Gamble; Vice-Pres., Miss G. Woods; Sec., Miss L. Craig; Treas., Mrs. H. Macfarlane, 127 Gloucester St.; *Committees: Flower,* Mrs. W. Creighton; *Nominating,* Miss M. Ross, Mrs. R. Brown; *Reps.* to: *Local Council of Women,* Mrs. R. Stewart; *Blue Cross & The Cdn. Nurse,* Miss I. Johnston.

Owen Sound General and Marine Hospital

Hon. Pres., Misses E. Webster, W. Cooke; Pres., Mrs. J. Dewar; Vice-Pres., Miss A. Cook; Sec., Miss H. Weeden, 507-13th St. A.W.; Treas., Miss A. Matches, 439-14th St. W.; *Com. Convs: Ways & Means & Purchasing,* Mrs. A. Storey; *Social,* Mrs. D. Watson; *Program,* Mrs. M. Keeling; *Membership,* Mrs. G. Gillesley; *Reps.* to: *Blue Cross,* Miss R. Showell; *R.N.A.O.,* Mrs. J. Dewar; *Local Council of Women,* Mrs. D. McKerroll; *The Cdn. Nurse & Press,* Miss Weeden.

Pembroke General Hospital
Lorrain School of Nursing

Hon. Pres., Sr. M. Camillus; Hon. Vice-Pres., Sr. St. Elizabeth; Pres., Mrs. I. Kehoe; Vice-Pres., Miss E. Falconi, Mrs. H. Patterson; Sec.-Treas., Miss E. Bradley, P.G.H.; *Committees: Publicity,* Miss J. Redmond; *Social,* Mrs. E. Cully; *Membership,* Miss T. Clarke; *Councillors,* Mmes F. Hemsley, T. Cassidy, G. Hennessey, Miss T. Brose; *Ed., News Bulletin,* Mrs. V. O'Dacre.

Peterborough Civic Hospital

Hon. Pres., Miss E. Robson; Past Pres., Mrs. P. Kingdon; Pres., Mrs. G. Wainwright; Vice-Pres., Misses M. Renwick, S. Brown; Rec. Sec., Mrs. R. Pearson; Corr. Sec., Mrs. E. Roberts, 166 Stewart St.; Treas., Mrs. F. Mason; *Editor,* Mrs. J. Mortimer; *Com. Conveners: Social,* Mrs. A. Logan; *Flower,* Mrs. H. Saunders; *Program,* Mrs. R. Stewart; *Film Council,* Mrs. D. Hill.

St. Joseph's Hospital, Port Arthur

Pres., Miss C. Connolly; Vice-Pres., Miss D. Commuzzi; Rec. Sec., Mrs. N. Vescio; Corr. Sec., Miss M. McEwen; Treas., Mrs. J. Wilmot; *Exec.,* Miss M. Flanagan, Mmes E. Chase, A. Colleran, V. Carty, N. Wright; *Visiting Conveners: Port Arthur,* Mrs. I. Caron; *Fort William,* Miss R. Shackleton.

St. Catharines General Hospital Mack Training School

Hon. Pres., Mrs. J. E. Porteous, Misses M. Hughes, C. Lymburner; Pres., Mrs. J. Secord; Vice-Pres., Mmes L. Flight, B. Thomas; Sec., Mrs. D. Glassford, 25 Clayburn Ave.; Treas., Miss N. Rolls, 54 Yates; *Com. Conveners: Social,* Mrs. A. Morley; *Program,* Miss M. Bagnall; *Visiting* and *Ways & Means,* Miss F. McCarter; *Phone,* Mrs. R. Ewing; *Advisory,* Mrs. J. Durham; *Rep.* to *The Cdn. Nurse,* Miss E. Buchanan.

St. Thomas Memorial Hospital

Hon. Pres., Miss B. Lewis; Pres., Miss M. Lyle; Vice-Pres., Mrs. F. Varney, Miss M. Van Velzer; Sec., Miss D. Smith; Corr. Sec., Miss B. Jack, 131 Myrtle St.; Treas., Mrs. F. Clunas, 34-3rd Ave.; Asst. Treas., Miss J. Watson; *Committees: Flower,* Miss C. Ferris; *Ways & Means,* Mrs. E. Clark; *Purchasing,* Mrs. M. Millman; *Social,* Misses P. Howell, B. Pow, Mrs. E. Arlein; *Exec.,* Mmes D. Astbury, E. Kew, Van Petter; *Grievance,* Misses S. Ross, A. Fryer, Mrs. M. Cuyler; *Rep.* to *R.N.A.O.,* Miss E. Dodds.

Sarnia General Hospital

Hon. Pres., Miss R. M. Beamish; Pres., Mrs. I. Williams; Vice-Pres., Mrs. C. Young; Sec. & Asst., Mme J. Lennox, M. Hockney; Treas. & Asst., Mmes S. Antenbring (237 Felin St.), B. Winder; *Committees: Program & Social,* Mmes C. McKinnon, M. Scanbrooke; *Visiting & Flowers,* Mrs. M. Grant; *Room,* Mrs. Young; *Rep. to Press,* Miss E. Stephens.

Stratford General Hospital

Hon. Pres., Miss A. M. Munn; Pres., Miss P. Whiteman; Vice-Pres., Miss E. Doupe; Sec., Miss M. Fisher, 85 Dufferin St.; Treas., Mrs. C. Walkom, 244 Front St.; *Com. Convs.: Social,* Miss R. Cleland; *Flower & Gift,* Miss E. Tee; *Reps.* to: *News Bulletin,* Mrs. M. Hoskopf; *Press,* Miss Fisher.

St. Joseph's Hospital, Sudbury

Hon. Pres., Sr. St. Philip; Hon. Vice-Pres., Sr. Françoise de Chantal; Pres., Miss E. Barbeau; Vice-Pres., Mrs. C. Egan; Sec., Mrs. R. Galey, 221 Lansdowne St.; Treas., Miss B. Laframboise, 130 Elm St. E.; *Councillors,* Miss I. Penman, Mrs. V. Houssar; *Visiting Conv.,* Miss C. Napier; *Rep.* to *The Cdn. Nurse,* Miss M. McDonald.

The Grant Macdonald Training School for Nurses, Toronto

Hon. Pres., Miss P. L. Morrison; Pres., Mrs. B. Darwent; Vice-Pres., Mrs. A. Wallace; Rec. Sec., Mrs. Cook, 16 Springhurst Ave.; Corr. Sec., Mrs. Jacques, 23 Fuller Ave.; Treas., Miss M. McCullough; *Social Convener,* Mrs. Smith.

Hospital for Sick Children, Toronto

Hon. Pres., Miss J. I. Masten; Pres., Mrs. C. I. Junkin; Past Pres., Miss J. Pope; Vice-Pres., Mmes K. Candy, W. H. Richardson; Rec. Sec., Miss C. Bunnell; Corr. Sec., Mrs. W. G. Raymond, 56 Indian Grove; Asst. Corr. Sec., Mrs. J. M. Samson; Treas., Mrs. J. Shackleton, 55 Mann Ave.; Asst. Treas., Mrs. H. Heine; *Councillors,* Misses K. Britton, M. Fitzgerald, Mmes E. A. Rupert, F. Smith.

Riverdale Hospital, Toronto

Pres., Mrs. W. Forge; Vice-Pres., Miss G. Gastrell; Sec., Mrs. H. Meen, 52 Riverview Gdns.; Treas., Mrs. T. Fairbairn, 98 Duvernet Ave.; *Committee Conveners: Program,* Miss E. Comper; *Visiting,* Mmes C. Spreeman, H. Dunbar; *R.N.A.O.,* Miss M. Ferry; *Rep.* to *The Canadian Nurse,* Miss A. Armstrong.

St. John's Hospital, Toronto

Pres., Miss V. Holdsworth; Vice-Pres., Mmes B. Browett, Smith; Sec., Miss R. Turnbull; Treas., Mrs. P. Thring; *Visiting Convener,* Miss R. Ramsden.

St. Michael's Hospital, Toronto

Hon. Pres., Sr. M. Maura; Hon. Vice-Pres., Sr. M. Kathleen; Pres., Miss P. O'Connor; Vice-Pres., Misses M. McGregor, P. Kennedy, M. Watson; Rec. Sec., Miss T. Hornberger; Corr. Sec., Miss S. Williams; Treas., Miss L. Richardson, 56 Roseheath Ave.; *Committees: Social,* Mrs. McAlpine; *Nurs. Educ.,* Miss G. Murphy; *Membership (Active),* Miss K. McNamee, *(Assoc.),* Mrs. A. Daley; *Press Publicity,* Miss R. Ellard; *News Ed.,* Miss L. McGurk; *Reps.* to: *R.N.A.O.,* Miss N. Devenish; *Registry,* Mrs. M. Baker, Misses G. Egan, A. Root; *I.C.W.,* Miss M. Fitzgibbon; *Councillors,* Mrs. V. Martin, Misses M. Holmes, L. Huck.

School of Nursing, University of Toronto

Hon. Pres., Miss N. D. Fidler; Hon. Vice-Pres., Miss F. H. M. Emory; Past Pres., Miss E. Cryderman; Pres., Miss Gwladwen Jones; Vice-Pres., Misses Ruth Kent, Margaret MacLachlan; *Bursary Fund,* Miss Edith Dick; Sec.-Treas., Mrs. Edna Querrie, 16 Belvale Ave., Toronto 18.

Toronto East General Hospital with which is incorporated the Toronto Orthopedic Hospital

Hon. Pres., Miss E. MacLean; Hon. Vice-Pres., Mrs. R. Couse; Pres., Miss M. Herbert; Vice-Pres., Misses D. Trusaler, H. Hall; Rec. Sec., Miss R. Carter; Corr. Sec., Mrs. G. Seelig, 37 Lynndale Rd.; Treas., Mrs. C. Philip, R.R. 1, Unionville; *Reps.* to: *R.N.A.O.,* Miss R. Hollingworth; *Press,* Miss J. Kennedy.

Toronto General Hospital

Pres., Miss E. Stuart; Vice-Pres., Mrs. M. Strong, Miss J. Dodds; Sec.-Treas., Miss E. B. Young, 4 Nottawa Ave., Algonquin Is., Toronto 2; *Councillors,* Misses H. McLaren, J. LePan, O. Wood, J. McBroom.

Toronto Western Hospital

Past Pres., Miss B. Miles; Pres., Miss K. Ellis; Vice-Pres., Misses G. Saunders, J. Taylor; Rec. Sec., Mrs. J. Gibson; Corr. Sec., Miss M. Mackenzie, 1 Rowanwood Ave., Apt. 1; Treas., Miss M. Steed, 1348 Yonge St., Apt. 105; *Reps.* to: *Blue Cross,* Miss M. Brown; *R.N.A.O.,* Miss E. Smith; *The Cdn. Nurse,* Miss M. McLeod, 26 Tichester Rd., Apt. 103.

Wellesley Hospital, Toronto

Hon. Pres., Miss E. K. Jones; Pres., Mrs. M. Dales; Vice-Pres., Miss E. Fisher; Rec. Sec., Mrs. M. Lye; Corr. Sec., Mrs. J. Patterson; Treas., Miss H. Carruthers, 42 Isabella St., Apt. 201; *Committees: Charity Fund,* Mrs. H. Farthing; *Social,* Miss N. Dalley; *Membership,* Miss J. Elliot; *Ways & Means,* Miss A. MacLean; *Custodian,* Miss B. Williams; *Auditors,* Misses A. Dinwoody, L. Quick; *Rep.* to *Press,* Miss M. Fraser.

Women's College Hospital, Toronto

Pres., Mrs. E. Reid; Vice-Pres., Miss D. Lockhart, Mrs. J. Smith; Rec. Sec. Mrs. G. Petersen; Corr. Sec., Mrs. W. J. Stacey, 108 Glenforest Rd.; Treas., Miss L. Bernache, 49 Duggan Ave.; *Councillors,* Misses McCarthy, Steele, Prosser, Bryant, Mrs. W. Stephens.

Ontario Hospital, New Toronto

Hon. Pres., Miss P. C. Graham, Mrs. C. Brock; Pres., Miss E. Bragg; Vice-Pres., Miss M. Dickie, Mrs. E. Baker; Rec. Sec., Miss E. Greenslade; Corr. Sec., Miss L. Sinclair, 19-17th St., New Toronto 14; Treas., Mrs. E. Claxton, 1007 Lakeshore Rd., Toronto 14; *Committees: Membership,* Misses V. Davey, L. Robertson; *Program,* Miss E. Moriarity; *Social,* Misses G. Reid, I. Gibson, Mrs. P. Henderson; *Scholarship,* Miss A. Burd; *Flower Fund,* Misses Burd, H. Corkery; *Rep.* to *The Cdn. Nurse,* Miss M. Doucett.

Connaught Training School for Nurses Toronto Hospital for Tuberculosis, Weston

Hon. Pres., Miss E. Macpherson Dickson; Pres., Miss E. Tilyard; Vice-Pres., Miss H. Dixon; Sec., Miss P. Reid, 188 Glenvale Blvd., Toronto 17; Treas., Mrs. L. E. Bruford, 1133 Greenwood Ave., Toronto 6; *Committee Conveners: Social,* Mrs. M. Harrison; *Flower,* Mrs. L. Lohnas.

Grace Hospital, Windsor

Pres., Miss Kathleen Burgess; Vice-Pres., Mrs. John Webb; Sec., Miss Eunice Hickson; Treas., Miss Mary Burbridge, G.H.

Hotel Dieu Hospital of St. Joseph, Windsor

Pres., Mrs. Robert Tinning; Past Pres., Miss M. Boles; Vice-Pres., Mrs. Rumstedles; Rec. Sec., Mrs. Patrick J. Mailloux, 686 Pelissier St.; Treas., Miss Rita Fonfara, H.D.H.; *Social Sec.,* Mrs. J. Bedard.

Woodstock General Hospital

Hon. Pres., Miss C. MacCullie; Pres., Miss R. Loosmore; Vice-Pres., Miss M. Ross; Sec., Mrs. B. Baker; Asst. Sec., Miss M. Goad; Corr. Sec. & Bulletin Ed., Mrs. H. Town, 385 Ingersoll Ave.; Treas., Mrs. I. Watts, 475 Henry St.; *Committees: Program,* Misses B. Calvert, D. Schultz, Mrs. V. Innes; *Social,* Mrs. M. Tyler; *Flower & Gift,* Mrs. B. Meadows, Miss M. Fry; *Reps.* to: *Blue Cross,* Mrs. M. Tatham; *Press,* Mrs. M. Likens.

PRINCE EDWARD ISLAND

Prince Edward Island Hospital Charlottetown

Pres., Mrs. W. R. Shaw; Vice-Pres., Mrs. K. MacKinnon; Sec., Miss Florence MacLean, P.E.I.H.; Treas., Miss B. Tweedy; *Committees: Visiting,* Miss M. Thompson; *Finance,* Miss E. Hume; *Rep.* to *Press,* Mrs. N. D. MacLean.

QUEBEC

Children's Memorial Hospital, Montreal

Pres., Mrs. F. C. Martin, 3847 Hampton Ave.; Vice-Pres., Mrs. Rolph Illi, 3425 Ridgewood Ave., Apt. 421; Sec., Miss Hilda Nuttall, C.M.H.; Treas.; Mrs. R. Folkins, 732 Graham Blvd., Town of Mount Royal, Montreal 16.

Queen Elizabeth Hospital, Montreal

Hon. Pres., Miss E. Geiger; Pres., Mrs. P. Pugsley; Vice-Pres., Miss F. Bryant; Sec., Miss E. Williams, 3469 Prud'homme Ave., Apt. 5; Asst. Sec., Miss P. Johnson; Treas., Miss M. Bennett, 5201 Sherbrooke St. W., Apt. 16; Asst. Treas., Miss K. Grant; *Committees: Membership,* Miss E. Hawke; *Sick Benefit,* Miss I. Garrick; *Visiting,* Miss H. McMurtry; *Entertainment,* Mmes J. Yeates, V. LeBlanc; *Refreshments,* Misses A. Rutherford, G. Allnutt, E. Boa, M. Williams; *Reps.* to: *Local Council of Women,* Mmes M. Paul, W. Lee; *The Cdn. Nurse,* Miss A. MacDonald; *News Notes,* Miss D. Henshaw.

Hôpital Notre-Dame, Montréal L'Association des Gardes-Malades Diplômées

Prés., Mlle J. Ouimet; Vice-Prés., Mlle C. Thebèrge; Sec.-Arch., Mlle M. L'Hérault; Sec.-Corr., Mlle H. Trépanier; Trés., Mlle C. Charlebois; Assist. Trés., Mlle J. Lafaille; *Conseillères,* Mlles L. Phaneuf, I. Hardy, M.-P. Simard.

The Montreal General Hospital

Hon. Pres., Miss M. L. Parker; Hon. Treas., Miss I. Davies; Hon. Member, Miss A. I. Black; Pres., Miss N. Mackenzie; Vice-Pres., Misses E. Odell, B. Herman; Rec. Sec., Miss E. Chalmers; Corr. Sec., Miss D. Neville, 1615 Lincoln Ave., Apt. 10; Treas., Miss M. MacLeod; *Committees: Exec.,* Misses M. MacDonald, Herman, I. Jensen, Mmes L. H. Fisher, B. S. Johnston; *Program,* Misses C. MacMillan *(conv.),* E. Munro, Mrs. E. Harnish; *Archives,* Misses Mackenzie *(conv.),* Odell, Mmes J. P. Robb, F. M. Bourne; *Visiting,* Mrs. G. Sonne, Miss B. Zinck; *Refreshments,* Misses M. Milligan *(conv.),* E. Skutesky, V. Crouse; *Reps.* to: *Mtl. Council of Women,* Mmes J. T. Allan, A. G. Gillespie; *The Cdn. Nurse,* Miss A. Reid. *MUTUAL BENEFIT ASS'N:* Pres., Miss N. Mackenzie; Vice-Pres., Miss Odell, Sec., Miss Chalmers; Hon. Treas., Miss Davies; Treas., Miss MacLeod; *Exec. Com.,* Misses MacDonald, C. Angus, R. Francis, M. Gower-Rees.

Royal Victoria Hospital, Montreal

Hon. Pres., Mrs. M. A. Stanley; Pres., Mrs. C. Sutherland; Vice-Pres., Misses H. Lamont, G. Purcell; Rec. Sec., Miss M. Chisnell; Sec.-Treas., Mrs. R. C. Fetherstonhaugh, Alumnae Office, Nurses' Home; *Board of Directors,* Misses J. MacKay, Lamont, Purcell, Chisnell, R. Ackhurst, K. Hudson, J. Trenholme, A. Crickard, E. Geiger, E. Atkinson, Mmes Sutherland, W. F. S. Greene; *Standing Committee Conveners: Program,* Miss Ackhurst; *Finance,* Miss Crickard; *Private Nursing,* Miss Atkinson.

St. Mary's Hospital, Montreal

Pres., Miss B. Ellard; Vice-Pres., Miss K. Brady; Rec. Sec., Miss J. O'Shea; Corr. Sec., Mrs. R. Gallagher; Treas., Miss Mabel Smith; *Committees: Membership,* Miss R. Woods; *Hospitalization,* Miss E. O'Hare; *Visiting,* Mrs. B. McSherry, Miss D. Molloy; *Social,* Miss W. Rygier *(conv.),* Misses J. Thoms, B. Coughlan, F. St. Onge, Mrs. J. Lamont; *Private Duty,* Misses Woods, D. Sullivan; *Rep.* to *Press,* Miss B. Grace, 4010 Cote Ste. Catherine Rd.

School for Graduate Nurses McGill University, Montreal

Pres., Miss M. McKillop; Vice-Pres., Miss E. Geiger; Sec., Miss F. Lamont, Shriners' Hospital; Treas., Miss F. May, 1040 Atwater Ave.; *Committee Conveners: Publications,* Miss E. Wolfe; *Entertainment,* Miss I. Riley; *Reps.* to: *Local Council of Women,* Mmes E. McNaughton, O. Barwick; *Teaching,* Miss M. Prowse; *Administration,* Miss H. Hewton; *Public Health,* Miss W. McCaffrey.

Jeffery Hale's Hospital, Quebec

Pres., Miss M. Jones; Vice-Pres., Mmes J. Myers, A. Seale; Sec., Mrs. D. Eglinton, 1350 du Buisson, Sillery; Treas., Mrs. V. Denison, 2136 de la Bourbonnière, Sillery; *Councillors,* Mmes Myers, Simons, Pugh, Treggett, Miss Weary; *Committees: Visiting,* Mmes Teakle, Kennedy, Misses Walsh, Currie; *Purchasing,* Mmes Seale, Nattress, Miss Weary; *Program,* Mmes Beattie, Myers, Baptist, Miss Dawson; *Refreshments,* Mmes Simons, West, Green, Pugh, Firth, Miss MacDonald; *Service Fund,* Mmes A. Seale, Cormack, Young, Miss Ford; *Reps.* to: *Private Nursing,* Mrs. Baptist, Miss Walsh; *The Cdn. Nurse,* Miss Dawson.

Sherbrooke Hospital

Pres., Miss R. Sutton; Vice-Pres., Mmes A. Lockley, J. Colton; Rec. Sec., Miss N. Beattie; Corr. Sec., Mrs. A. Savage, 514 Short St.; Treas., Mrs. G. Bryant; *Committees: Entertainment,* Mrs. G. Burt; *Flower & Gift,* Mmes N. Coates, H. Leslie; *Rep.* to *The Cdn. Nurse,* Miss V. Davies.

Reddy Memorial Hospital, Westmount

Hon. Pres., Miss E. Trench; Pres., Mrs. E. Aspler; Vice-Pres., Misses V. Sheppard, L. McClusky; Sec., Mrs. S. Levine, 4995 Hingston Ave., Montreal 29; Treas., Miss E. Francis; *Committees: Phone,* Mmes H. Levin, S. Levine, R. Wolfson, Miss McClusky; *Visiting,* Miss Sheppard; *Reps.* to: *M.G.N.A.* Miss R. Kirk; *The Cdn. Nurse,* Mrs. Wolfson.

SASKATCHEWAN

Grey Nuns' Hospital, Regina

Hon. Pres., Sr. A. Brodeur; Pres., Miss B. Cantalope; Vice-Pres., Mrs. Morton; Sec.-Treas., Miss J. Johnston, G.N.H.; Asst. Sec.-Treas., Miss B. Hailstone; *Committees: Lunch,* Misses P. Brankin, I. Lowey, B. Muller, Mrs. C. Folk; *Visiting,* Sr. Tougas, Miss R. Gagne; *Membership,* Miss M. Goski, Mrs. Morton; *Program,* Mrs. Sawcyn, Misses M. Boisjoli, N. Fulton, S. Normandin; *News Bulletin,* Miss Hailstone, Mrs. F. Hammond.

Regina General Hospital

Hon. Pres., Mrs. J. T. Waddell; Pres., Mrs. G. P. Wilson; Vice-Pres., Mrs. G. Askin; Sec., Miss H. Jolly; Treas., Miss R. Kennedy; *Program Conv.,* Miss V. Antonini; *Rep.* to *Press,* Miss P. Horrocks.

St. Paul's Hospital, Saskatoon

Pres., Miss M. Dingwall; Vice-Pres., Mrs. R. G. McKay, Miss I. Burkitt; Sec., Miss N. Humphries; Treas., Mrs. I. Redston, 309-9th St.; *Councillors,* Mmes M. Rogers, T. L. Atwell, Misses S. Leeper, A. Kucirka.

Saskatoon City Hospital

Past Pres., Mrs. D. Wilson; Pres., Mrs. H. McMillan; Vice-Pres., Mmes P. Berry, E. Sugarman; Sec., Mrs. B. McNelles; Treas., Mrs. J. Reder; *Committee Conveners: Social,* Mrs. M. Levers; *Ways & Means,* Mrs. M. Blacklock; *Visiting & Flowers,* Miss F. Bassingthwaite; *Phone,* Miss D. Knuckey; *Board of Governors,* Mrs. M. C. Tait; *Rep.* to *Press,* Mrs. S. Newby, 733-1st St. E.

Yorkton General Hospital

Hon. Pres., Mrs. L. V. Barnes; Pres., Mrs. E. Peet; Vice-Pres., Mrs. I. Torgenrud; Sec., Miss E. Kendal, Y.G.H.; Treas., Mrs. T. Stewart, Bevin Crt. Apts.; *Councillors,* Mmes V. Ellis, S. Dodds, Miss M. Holaday; *Committees: Flower & Gift,* Mrs. V. Weber; *Entertainment,* Misses R. Churko, L. Long; *Rep.* to *The Canadian Nurse,* Miss A. Gwilliam.

BERMUDA

King Edward VII Memorial Hospital

Pres., Mrs. B. Ingham; Vice-Pres., Mrs. A. Powell; Sec., Mrs. W. Stubbs; Treas., Miss J. Ainsworth, K.E.M.H.; *Committees: Exec.,* Mmes T. Davis, W. Mayor Jr., J. Nunan; *Refreshments,* Mmes E. Zuill *(conv.),* F. Tite, Miss M. Tingley; *Visiting,* Mmes H. Conchman *(conv.),* A. Macpherson, Miss D. Crawford.

Associations of Graduate Nurses

MANITOBA

Brandon Association of Graduate Nurses

Pres., Mrs. Eldon Hannah; Vice-Pres., Miss Jean Higgens, Mrs. J. Brereton; Sec., Mrs. T. Moir; Treas., Miss Jean Harding; *Social Convener,* Miss S. Strang.

QUEBEC

Montreal Graduate Nurses' Association

Hon. Member, Miss A. Colquhoun; Hon. Pres., Miss A. Jamieson; Pres., Mrs. F. Murray; Vice-Pres., Misses M. Wood, E. Dever; Sec.-Treas., Miss M. MacLeod; Rec. Sec., Miss K. Harvey; Dir., Nursing Service, Miss V. L. Kerr; *Reps.* from: *Montreal Gen. Hosp.,* Misses M. Cowie, M. Martin, Harvey, E. Anderson; *Royal Victoria,* Mrs. J. MacIntosh, Misses H. MacLean, E. Dewar, M. Kinder; *Queen Elisabeth,* Miss V. Butler; *St. Mary's,* Misses R. Wood, D. Sullivan; *Reddy Memorial,* Miss R. Kirk; *Children's Memorial,* Miss V. Ford; *Out of Town,* Mmes H. Jack, A. Maynard, R. Babbage, Miss H. Herman; *Committees: Finance,* Misses Dever, Kinder, Martin, V. Ford; *Registry,* Misses R. Wood, D. Sullivan; *House,* Misses Herman, Martin, Mrs. H. Jack; *Social,* Mmes Babbage, Maynard; *Reps.* to *Local Council of Women,* Miss Kerr, Mrs. G. Prideaux; *Registrars,* Misses J. Swan, E. Cumbers, Mrs. M. Bryce. *Ass'n address,* 1234 Bishop St.

Children's Memorial Hospital, Montreal Staff Nurses' Association

Pres., Mrs. N. Franklin; Vice-Pres., Miss M. Pinkerton; Sec., Miss McLennan; Treas., Miss J. Teuten; *Conveners: Educational,* Miss N. Pearson; *Social,* Miss J. Murphy.

Nursing Sisters' Association of Canada

Hon. Pres., Miss E. L. Smellie; Pres., Miss Mary Arnott, Col. Belcher Hosp., Calgary, Alta.; Vice-Pres., Misses M. Lovell, K. Morton, D. Latornell; Sec.-Treas., Miss Lillian Bibby, 2614 - 7th Ave. N.W., Calgary; Asst. Sec.-Treas., Miss M. Brown, 1330-16th Ave. W., Calgary; *Councillors,* Miss M. G. Paterson, Mmes E. C. Ironside, W. Pillidge, M. Robinson.

Toronto Unit

Pres., Miss F. Matthews; Past. Pres., Miss D. Macham; Vice-Pres., Misses B. Seeds, G. Paterson; Rec. Sec., Miss E. Beardmore, 204 Parkmount Rd.; Treas., Miss H. Rendall, 54 Maitland St.; *Committee Conveners: Club House,* Mrs. G. Storey; *Overseas Boxes,* Miss P. Bragg; *Blue Cross,* Mrs. B. Tite; *Social,* Miss B. Keagey; *Poppy Day,* Mrs. D. Philps; *Publicity & News Letters,* Miss M. Porter; *Cards, Flowers & Visiting,* Miss N. Marshall; *Directory,* Mrs. E. Jarvis; *Councillors,* Misses E. Campbell, K. Christie, A. M. Grindley, I. Fairfield, M. Wylie.

PLEASE CHECK YOUR LISTING!

Under a new directive, approved by the Editorial Board of *The Canadian Nurse* and the Executive Committee of the Canadian Nurses' Association, the Official Directory henceforth will be published only in the **June** and **December** issues of the *Journal.*

The names of officers and committee chairmen listed in this Official Directory are correct, according to information available in *The Canadian Nurse* office prior to publication date. When new elections are held, the revised list should be sent to this office immediately. Do not forget to include the addresses of the *Secretary* and *Treasurer.* If it is not possible to type your lists, please PRINT THE NAMES. Alterations or corrections to appear in the *December, 1954,* issue of the Directory should be received before **November 1st.**

Address all communications to:

THE CANADIAN NURSE
1522 SHERBROOKE STREET, WEST
MONTREAL 25, QUEBEC